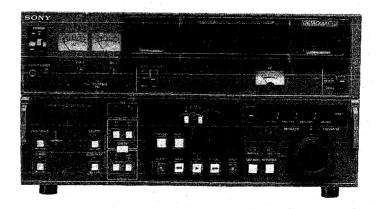
VIDEOCASSETTE PLAYER

# **PVW-2650P**

# SERVICE MANUAL

Vol.2 1st Edition Serial No.10001 and Higher



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FRAME (1) ———	
AC-133	
CL-25	
DE-15	
DS-31	
LP-57	
PC-62	
PD-56	
PTC-42	
PTC-49	
PTC-54	
PTC-55	
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# SECTION 14

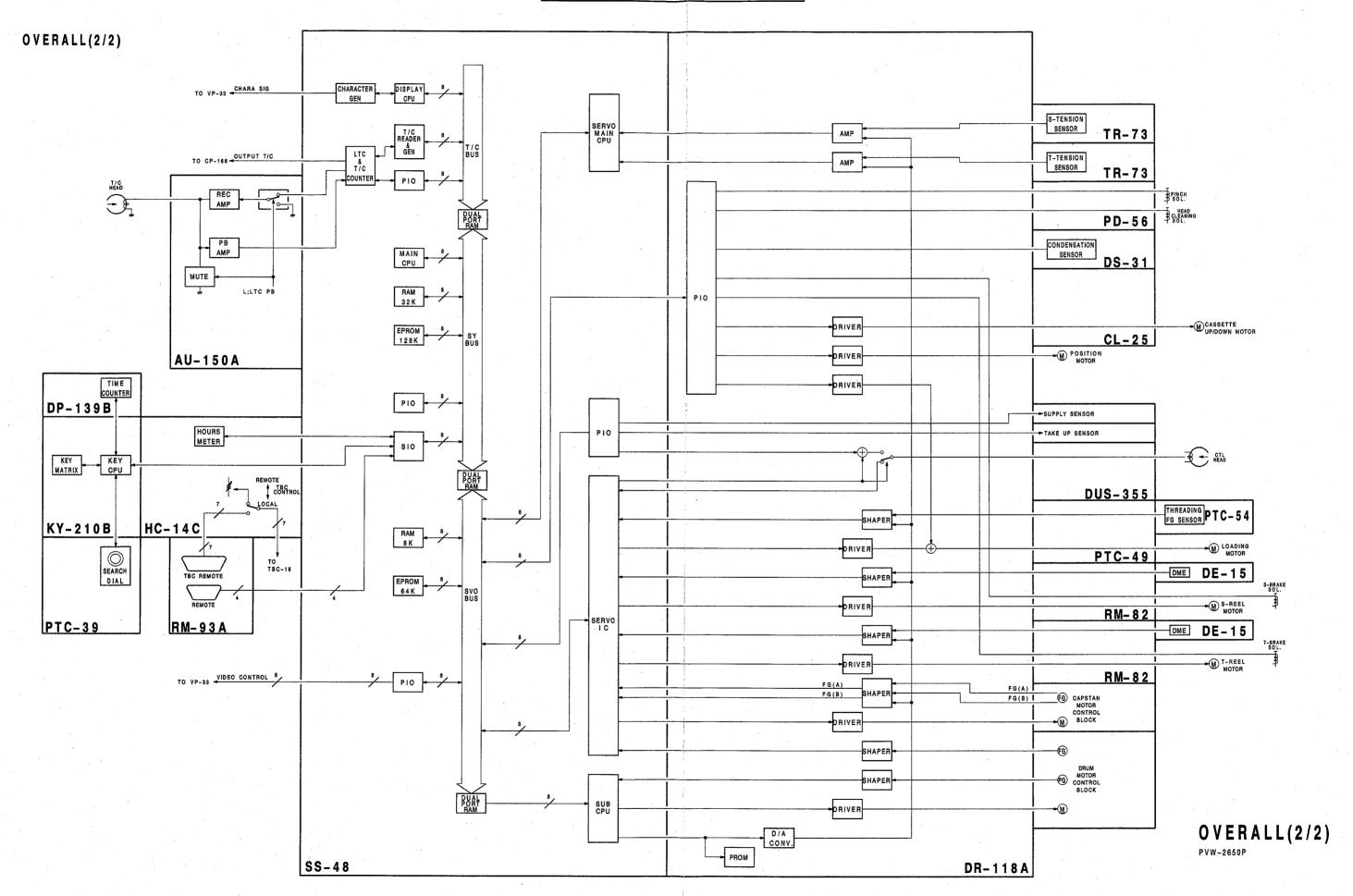
VR-116B

MA-44B

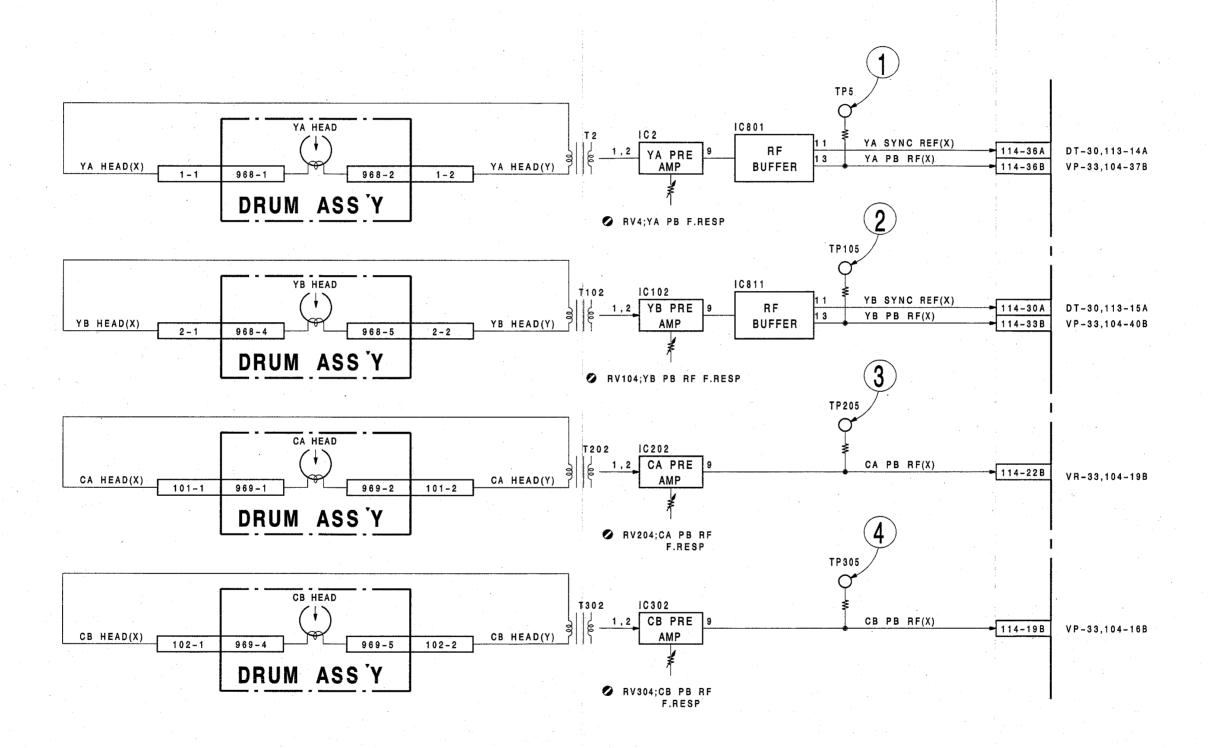
14-1

**BLOCK DIAGRAM** OVERALL(1/2) VIDEO CONTROL FROM SS-48 VIDEO METER SW-444B NON-LINEAR DE-EMPHASIS A/D CONV. 8 EDGE NOISE REDUCTION D/A CONV. MEMORY Y CH-A MUTE Y CH-B C CH-A SYNC SEP WCK GEN DUB Y
I DUB R-Y/Y
I DUB B-Y/C
I DUB REF VIDEO 8 R-Y B D/A CONV. NON-LINEAR DE-EMPHASIS A/D B DO CODE PB AMP COS EQ DEMOD -LCC SIGNAL GEN MUTE MIX SYNC SEP WCK GEN VIDEO OUT 1 VIDEO OUT 3 RP-57BP VP-33BP(1/2) TBC-18P VP-33BP(2/2) FROM SS-48 ( CHARA FRAME FROM 88-48 OUTPUT T/C CP-166A NOISE REDUCTION L;CH-1 MONITOR AU-148AP L;CH-2 MONITOR OUTPUT NOISE REDUCTION AUDIO CH-2 I/O PORT EXPANDER AU-149AP CP-167A BIMORPH DRIVE ВІМОЯРН CH-1 METER DT-29AP Y SYNC REF CAPSTAN 2FG OVERALL(1/2) L;DT.DTx3.PB FIELD O/E TBC-18

DT-30



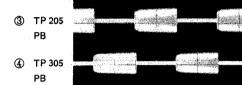
# RF PB AMPLIFIER



RP-57BP



V: 200 mV/div H: 10 ms/div

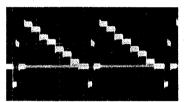


V: 200 mV/div H: 10 ms/div ① TP 201 PB



V : 200 mV/div H : 2 ms/div

② TP 202 PB



V: 200 mV/div

H:20 μs/div

③ TP 204 PB



V : 500 mV/div Η : 20 μs/div

④ TP 501 PB



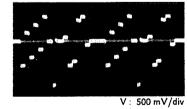
V : 200 mV/div Η : 20 μs/div

(5) TP 502 PB

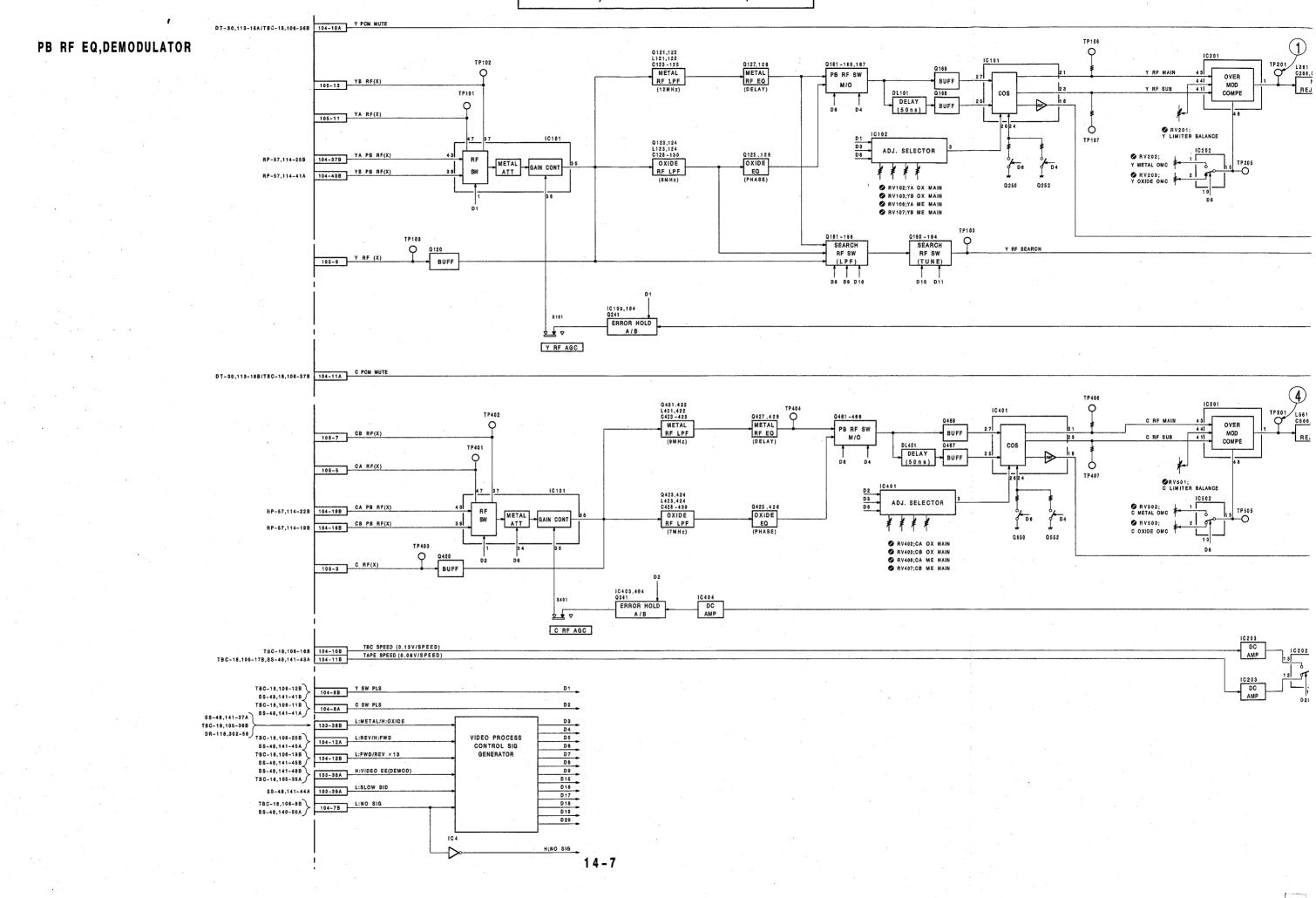
V : 200 mV/div

H :  $20 \,\mu\text{s/div}$ 

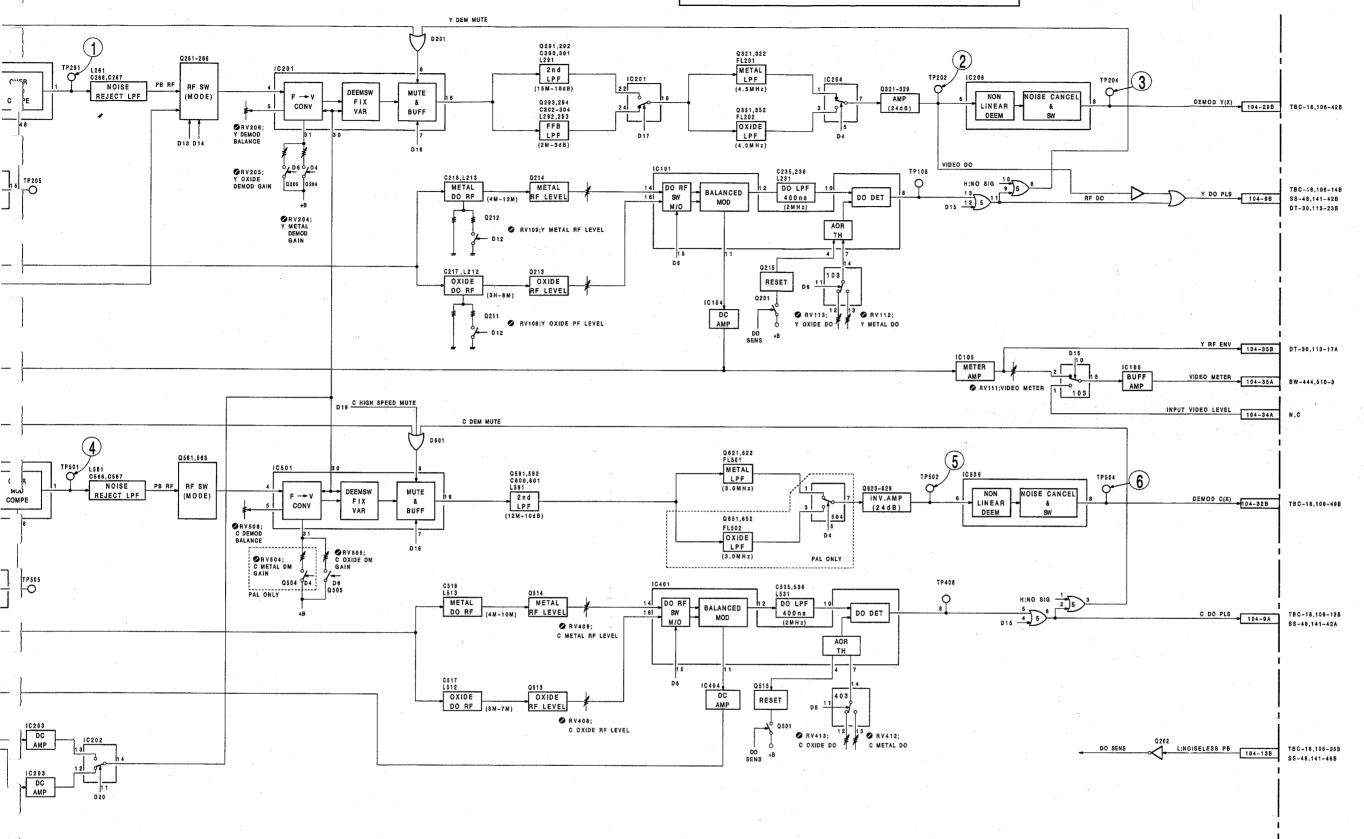
⑥ TP 504 PB



H : 20 μs/div

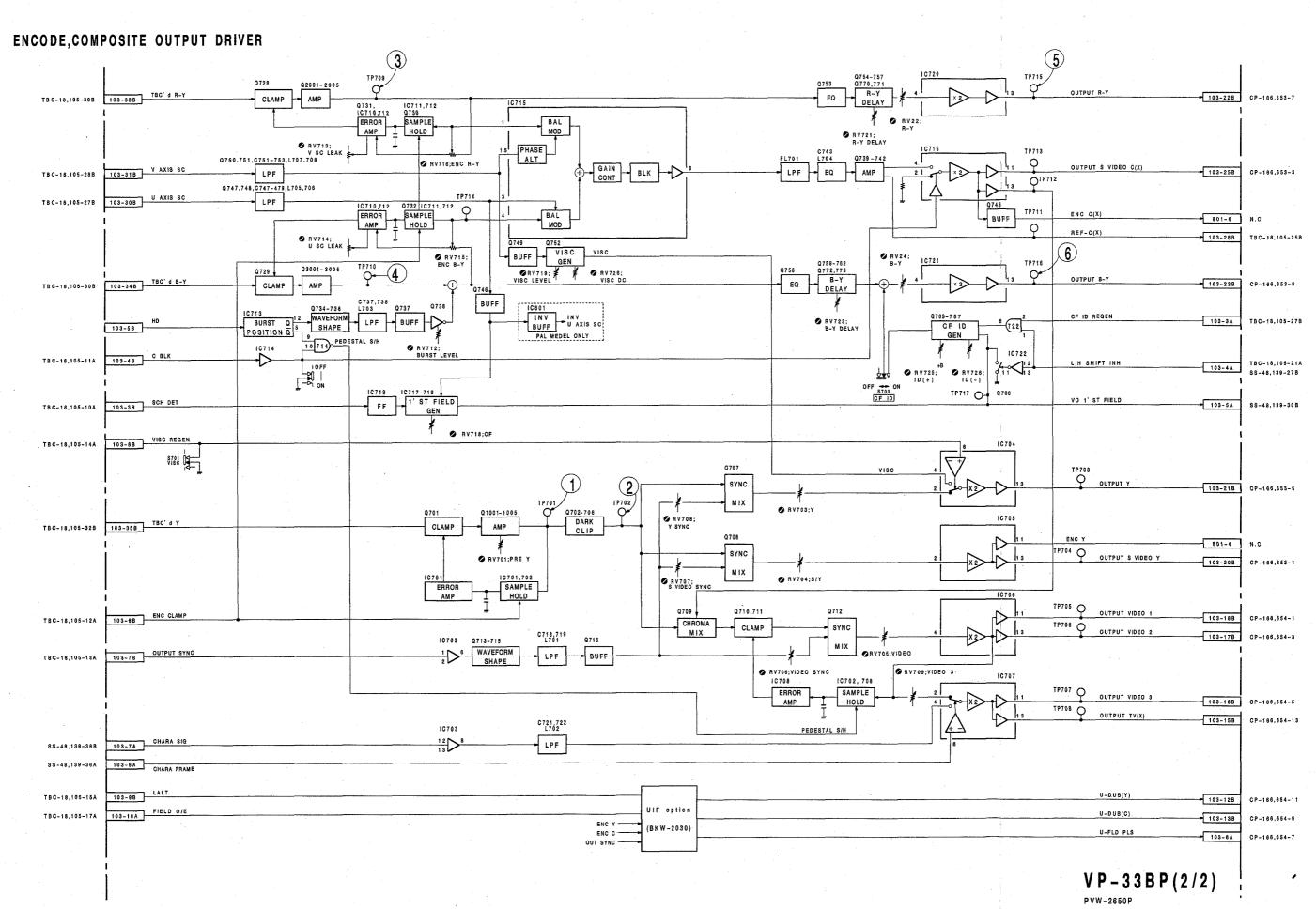


# PB RF EQ,DEMOD. PB RF EQ,DEMOD.



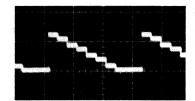
VP-33BP(1/2)

PVW-2650P



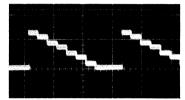
ENCODE,OUTPUT ENCODE,OUTPUT

① TP 701 PB



V : 1 V/div H : 20 μs/div

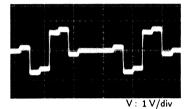
② TP 702 PB



V: 1V/div

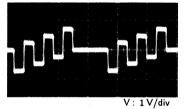
H : 20 μs/div

③ TP 709 PB



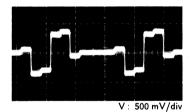
H: 20 μs/div

④ TP 710 PB



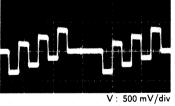
H: 20 μs/div

TP 715 PB



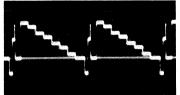
 $H: 20 \mu s/div$ 

TP 716
PB



H : 20 μs/div

① TP 101 PB



V : 1 V/div Η : 20 μs/div

② TP 201 PB



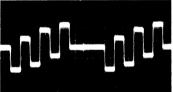
V: 1 V/div H: 20 μs/div

③ TP 500 PB



V : 500 mV/div H : 20 μs/div

④ TP 501 PB



V : 500 mV/div H : 20 μs/div

⑤ TP 502 PB

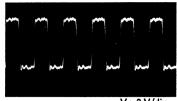


V : 500 mV/div H : 20 μs/div

⑥ TP 303



V : 2 V/div H : 20 μs/div ⑦ TP 304 PB



V: 2 V/div H: 50 ns/div

(8) TP 403 PB

V: 2 V/div H: 50 ns/div

1C 403 4 EXTRST

MM Q 13 SMPL PLS

IC484

83-89 1C409

D/A CONVERTER

LV400; AMP

A/D CONV.

CLAMP

1C405,406 2 RV 402; C ERR CLIP

vco

SYNC GUARD BLOCK

SELECTOR

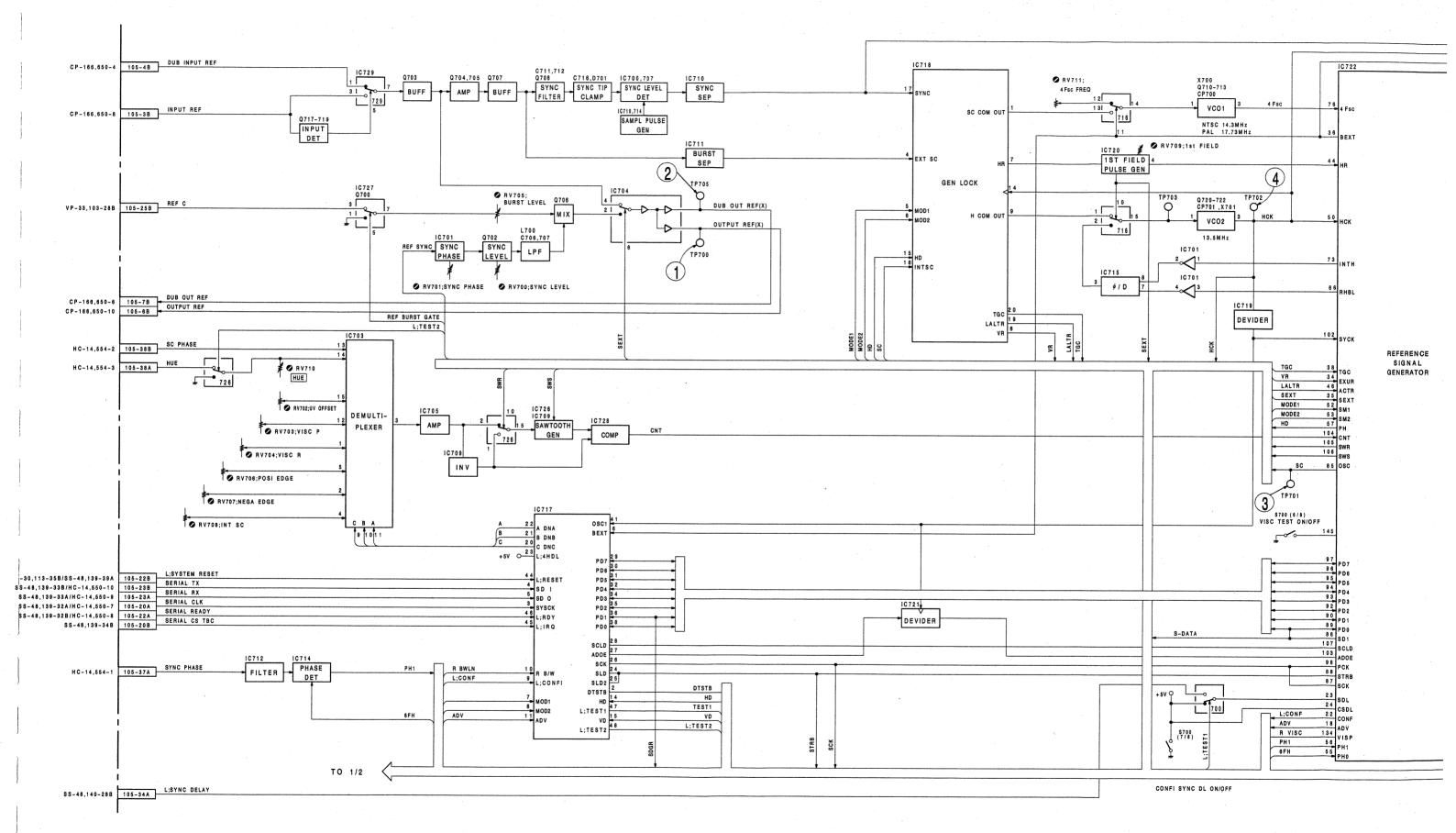
AMP CELAY

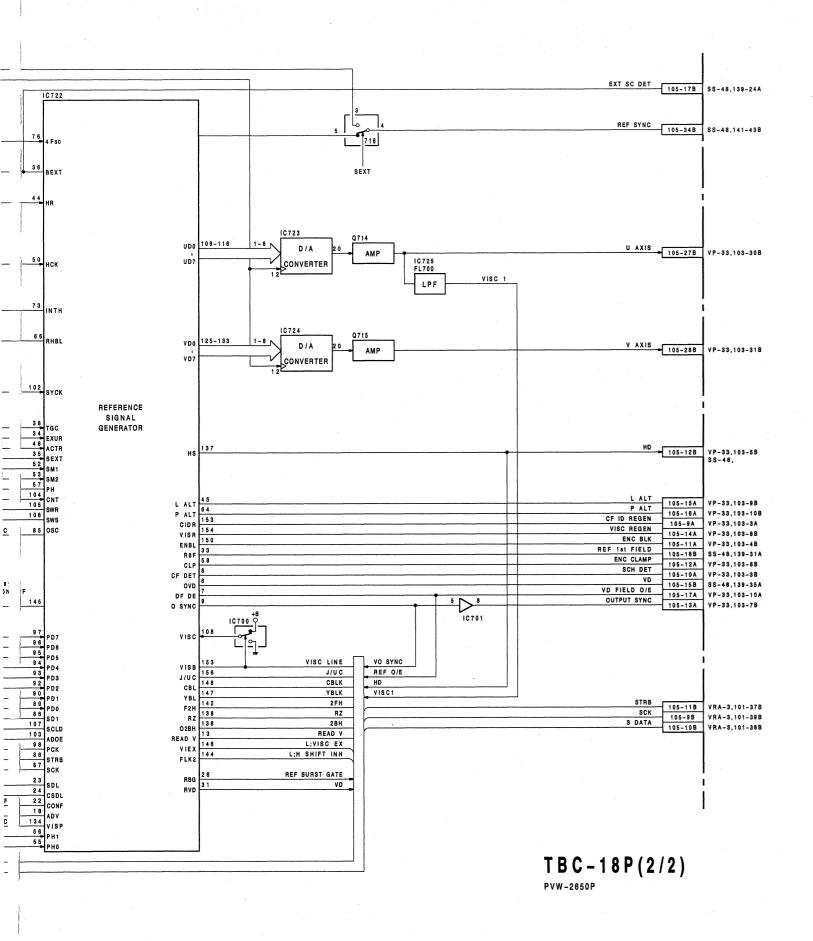
RV400; YC DELAY

HC-14,554-7 105-40A Y/C DELAY

VP-33,104-11B 88-48,141-43A V REF

#### T IE BASE CORRECTOR





① TP 700

② TP 705 PB



V : 500 mV/div

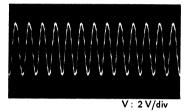
H : 20 μs/div

③ TP 701 PB



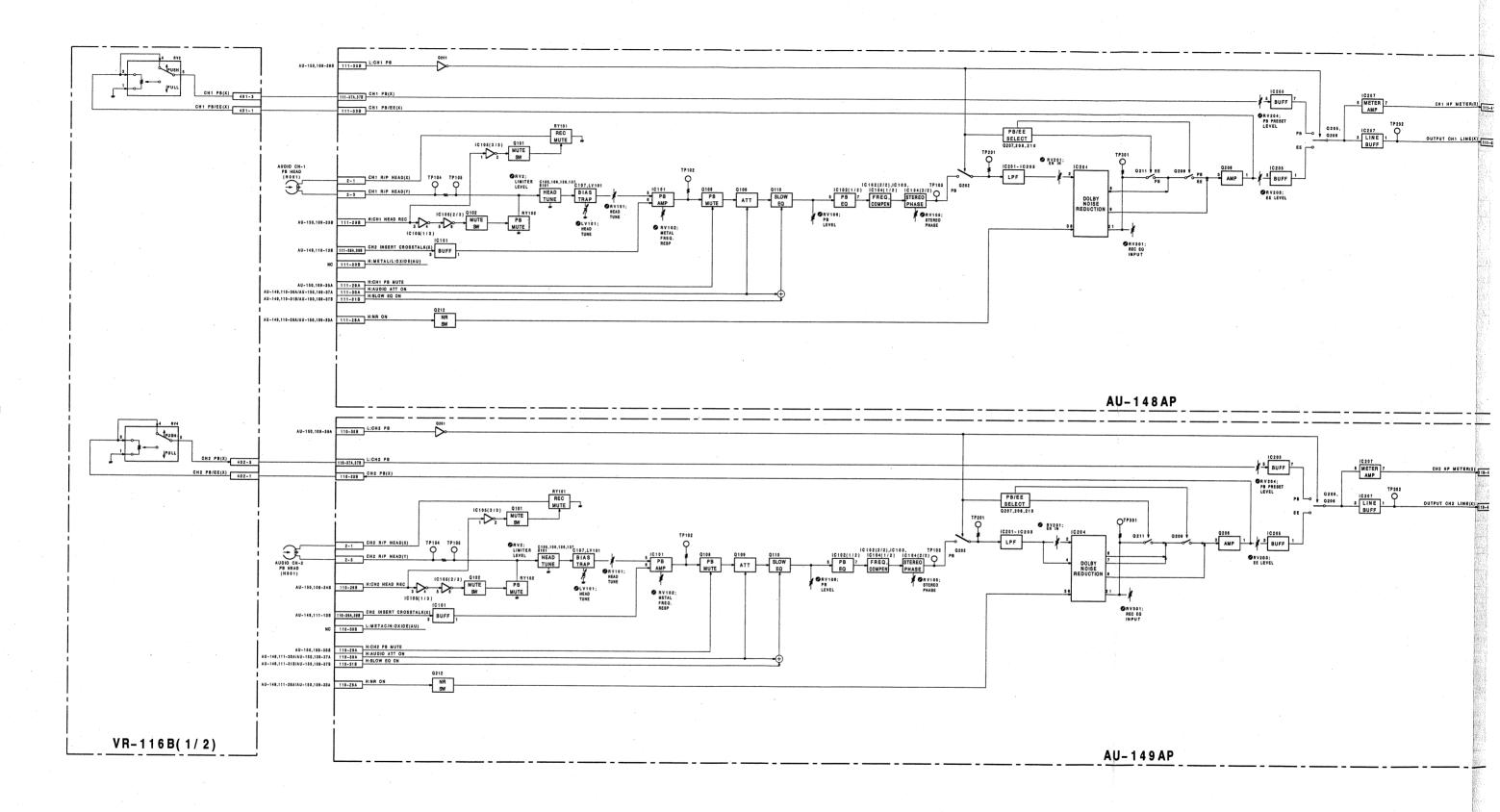
V: 2 V/div H: 100 ns/div

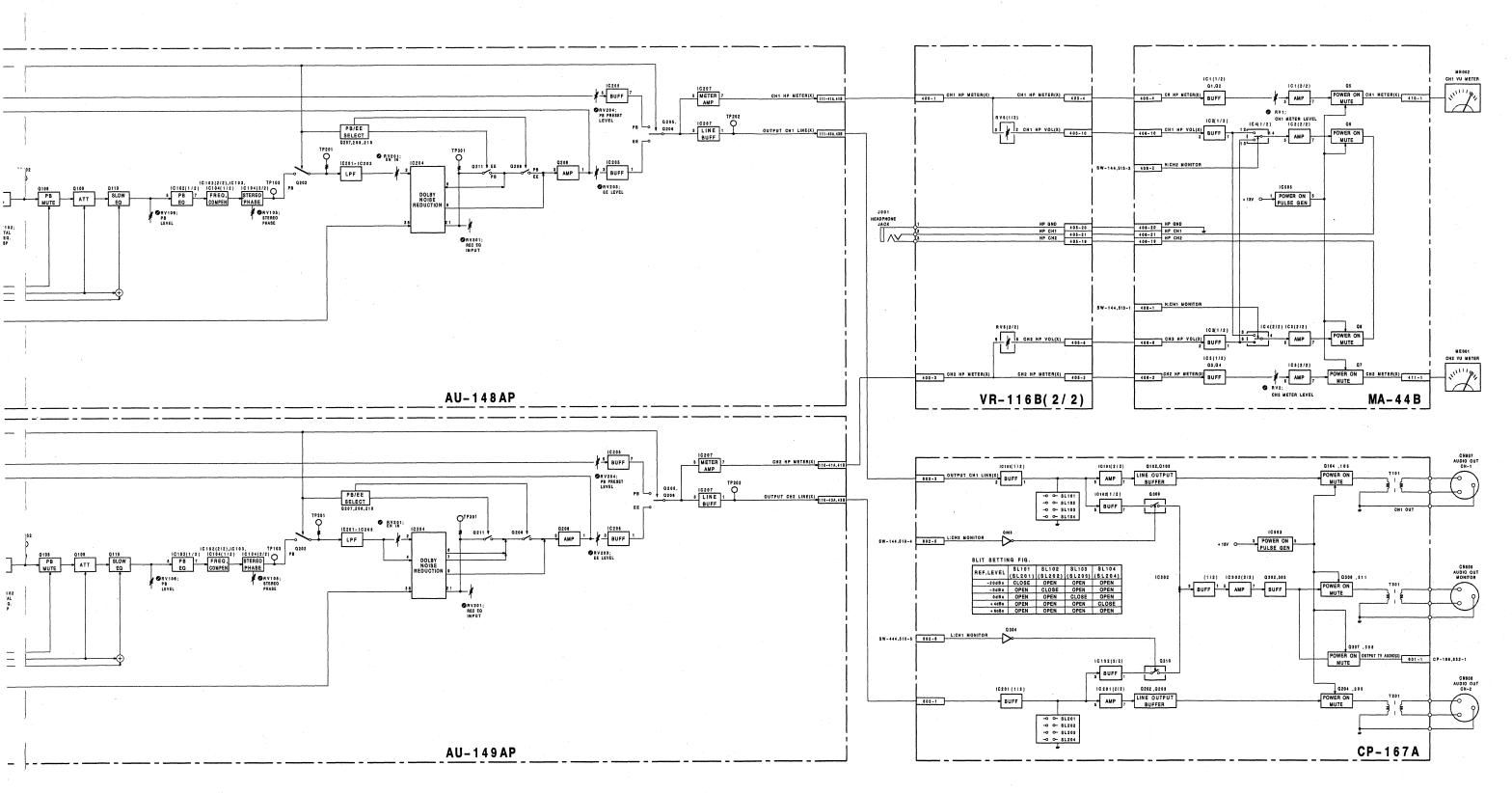
④ TP 702 PB



H: 100 ns/div

# AUDIO CH-1/CH-2 PB PROCESS, DOLBY SYSTEM, OUTPUT DRIVER, METER DRIVER





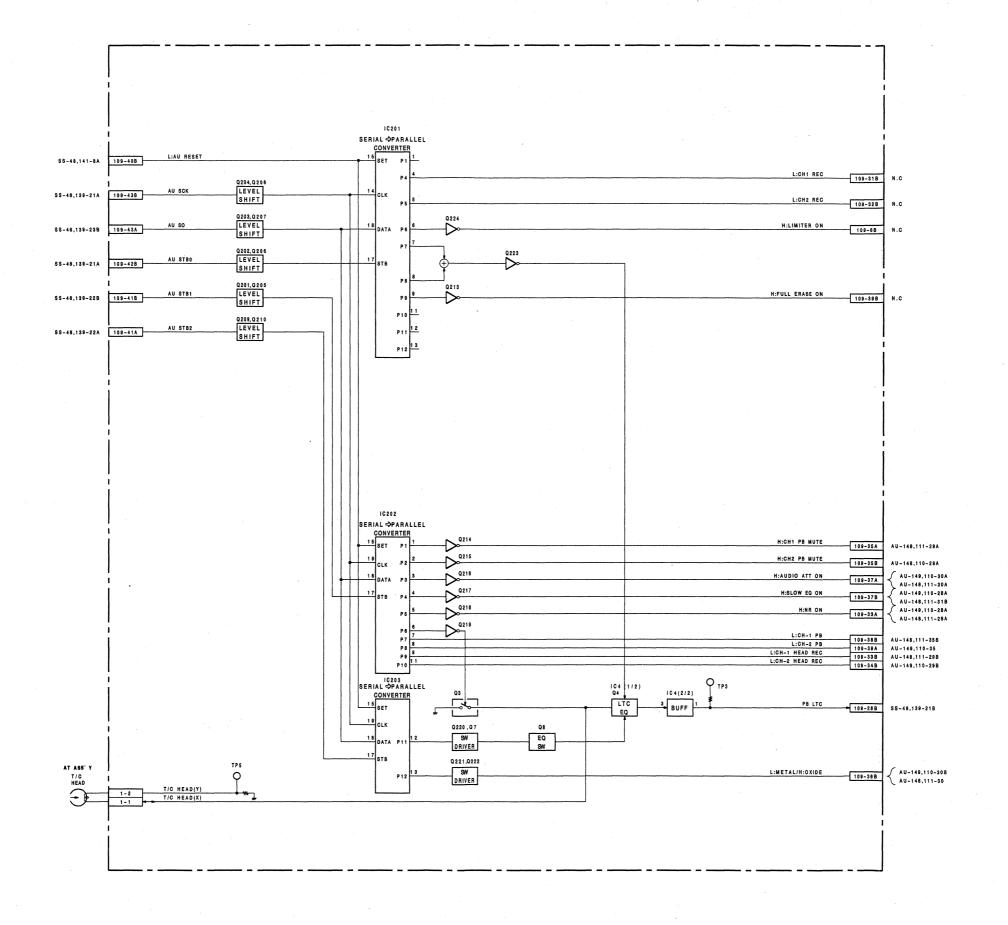
UDIO(1) AUDIO(1)

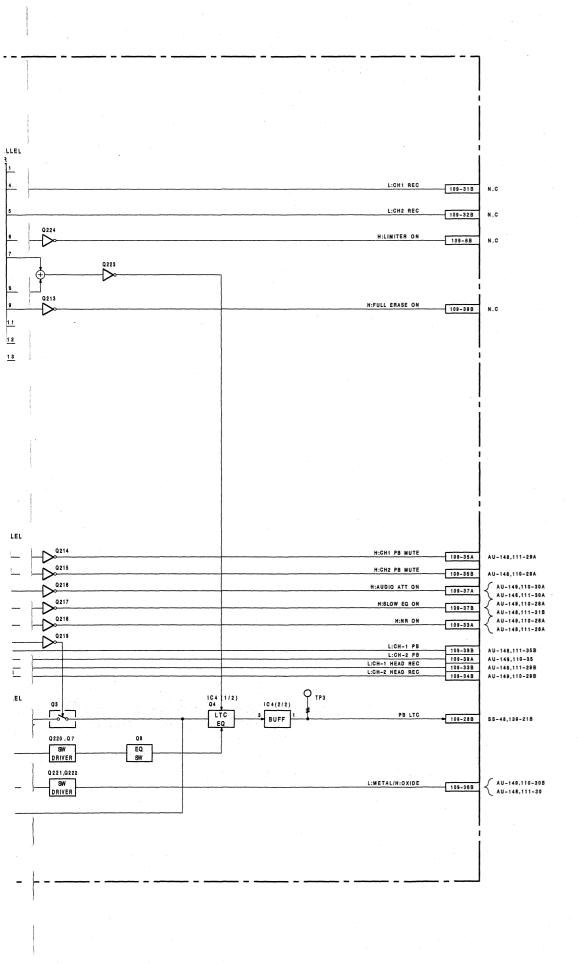
14-15

AU-148AP/149AP

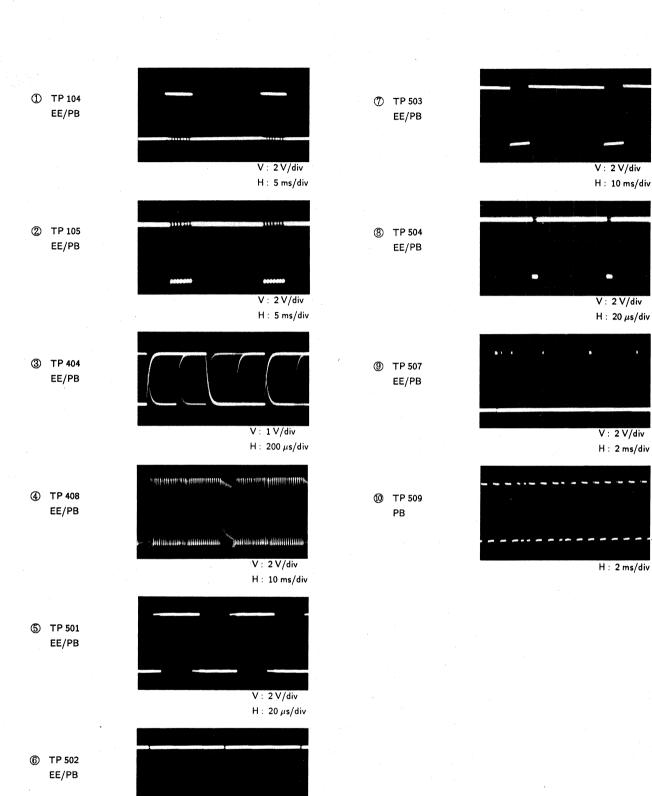
PVW-2650P

# AUDIO MODE CONTROL,LTC PB



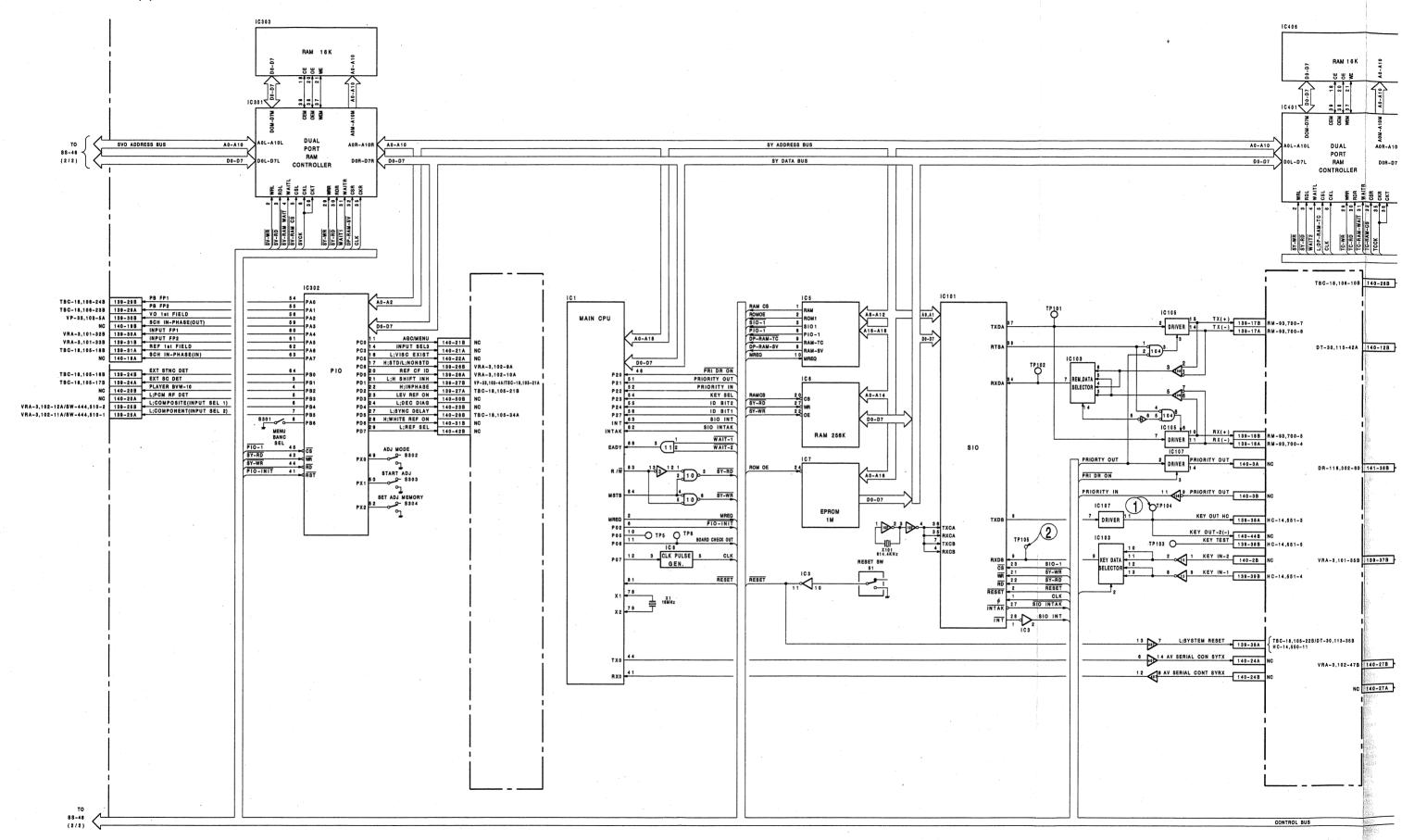


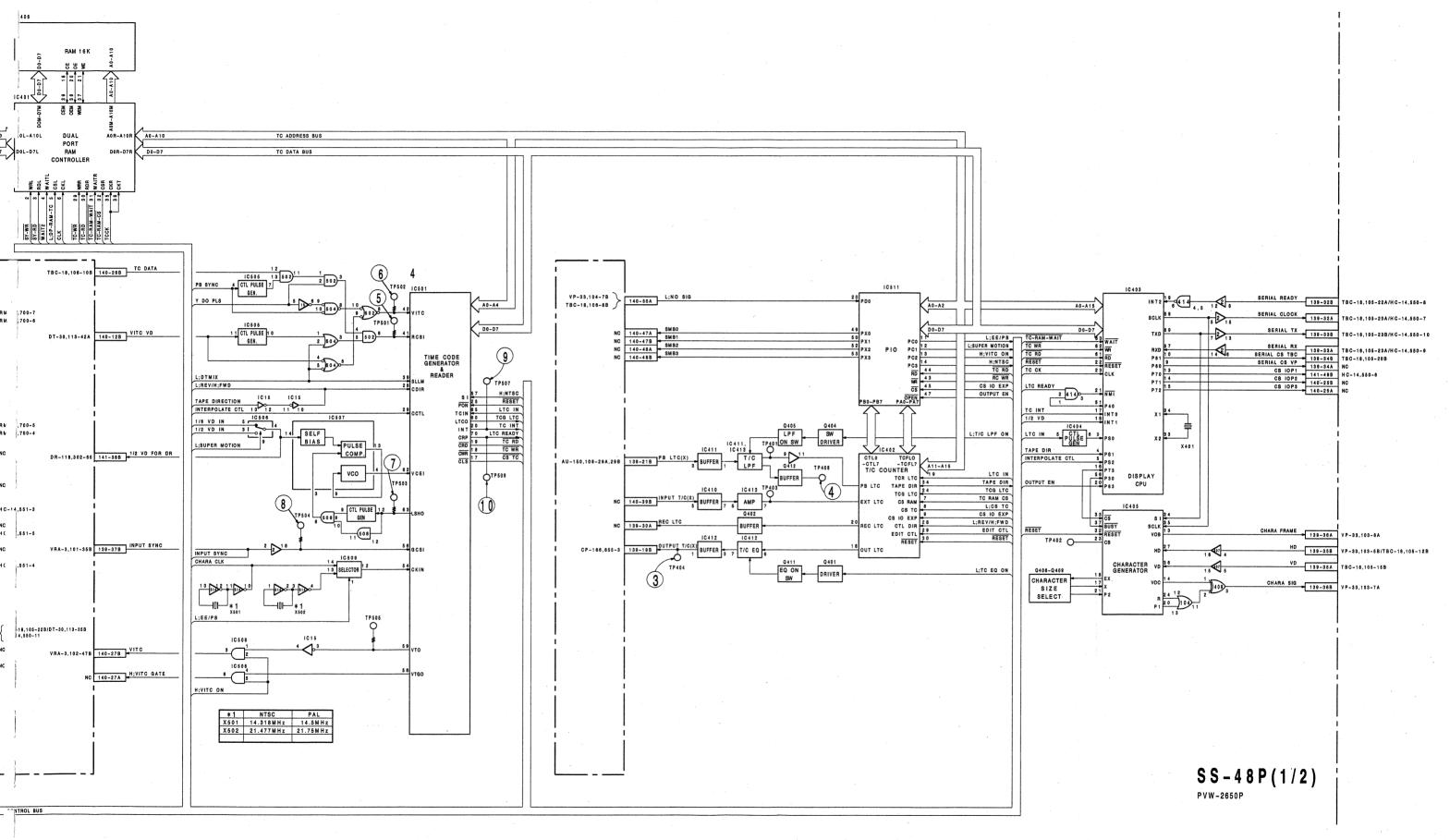
# **YSTEM CONTROL (1)**



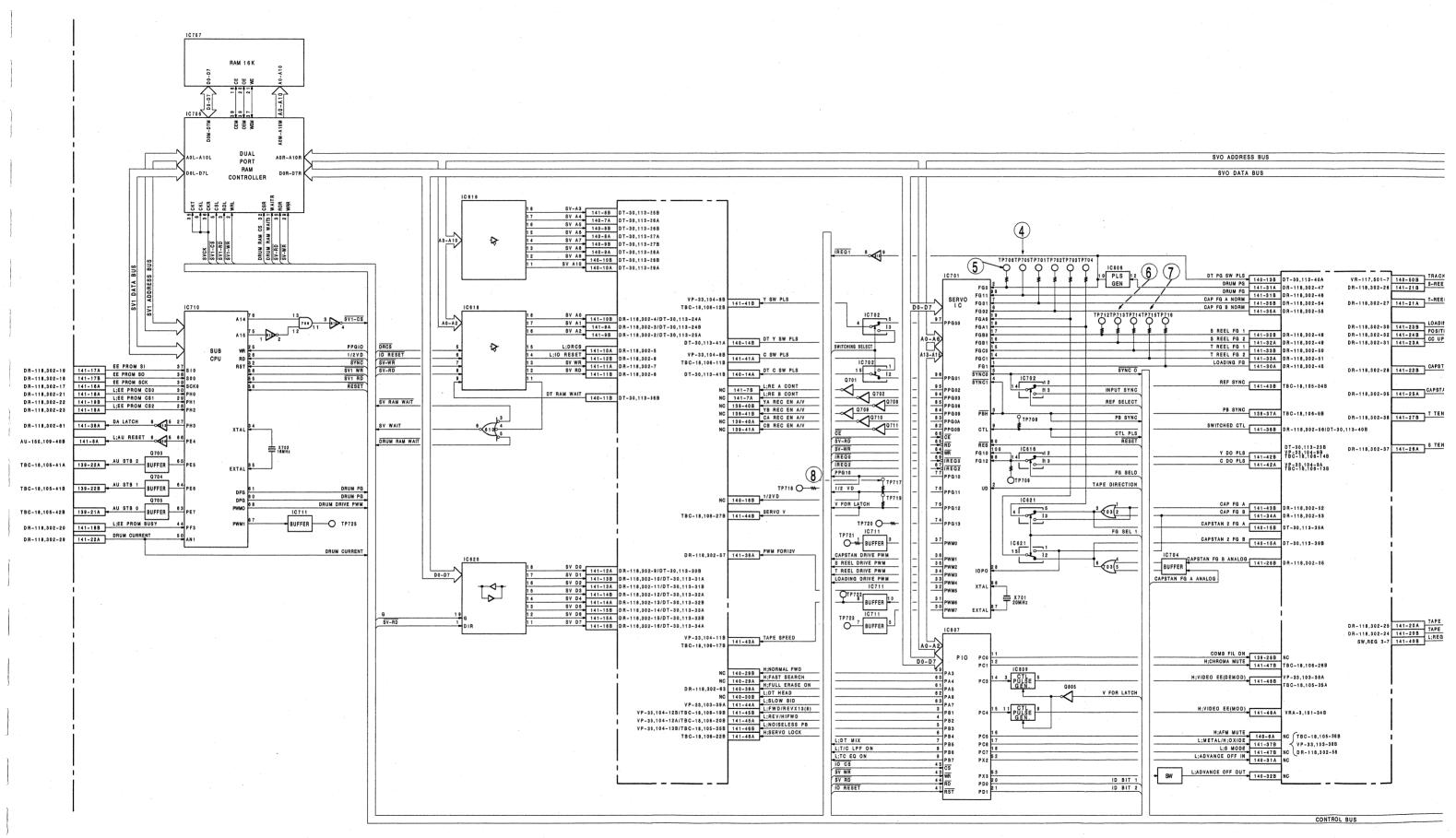
V : 2 V/div H : 20 μs/div 4.8 V p-p

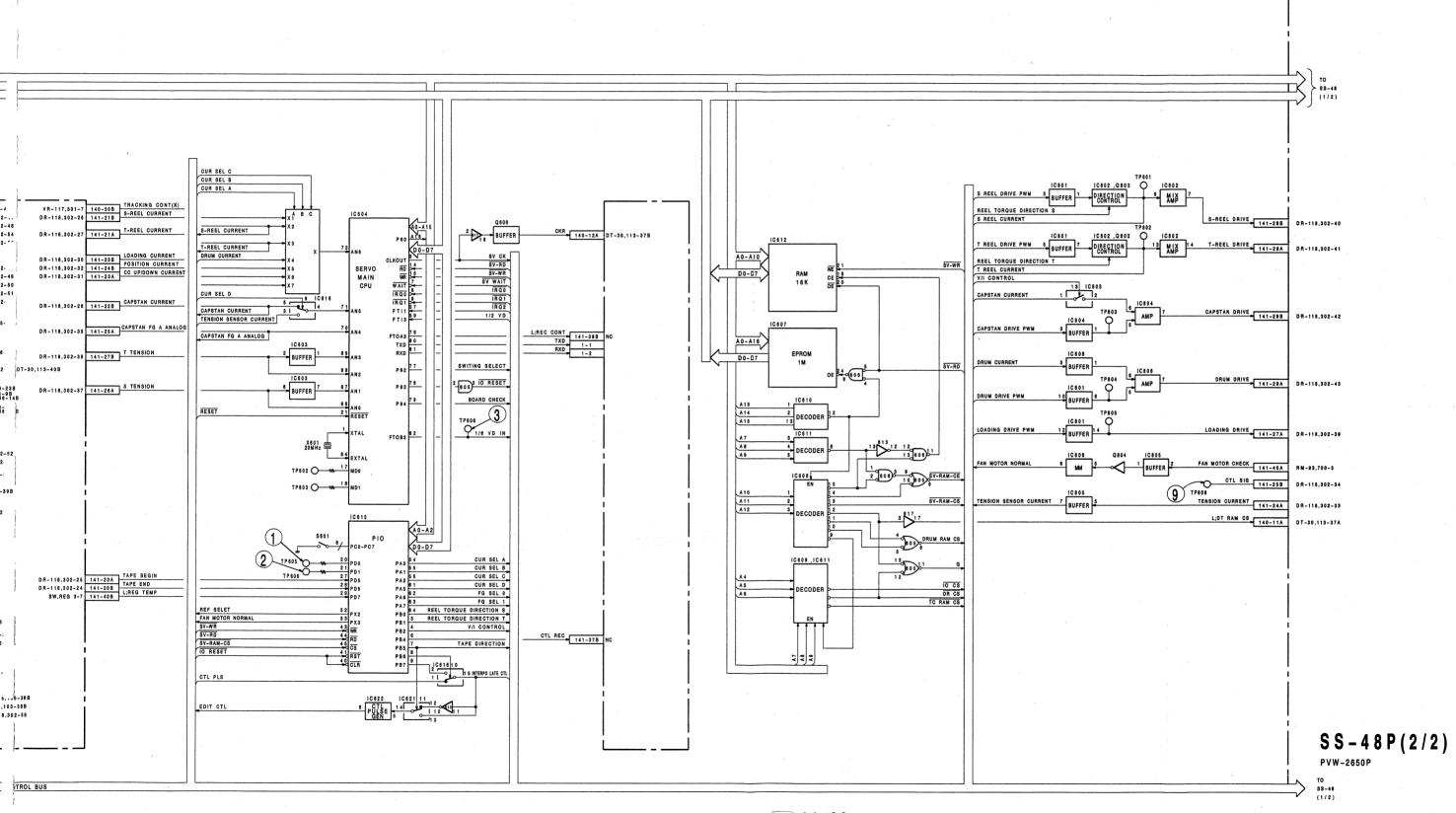
# SYSTEM CONTROL(1)

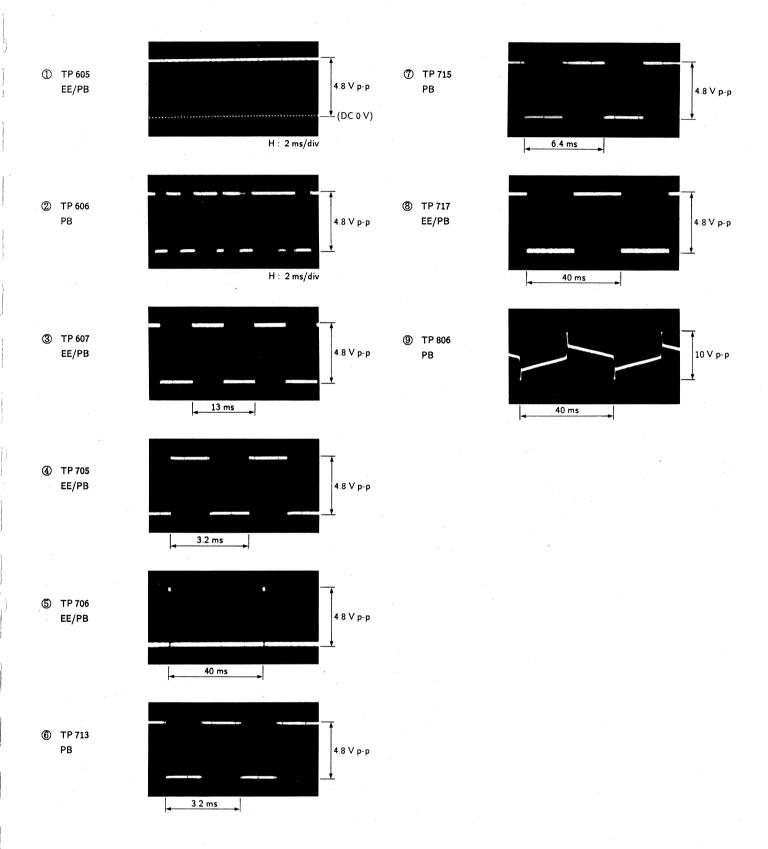


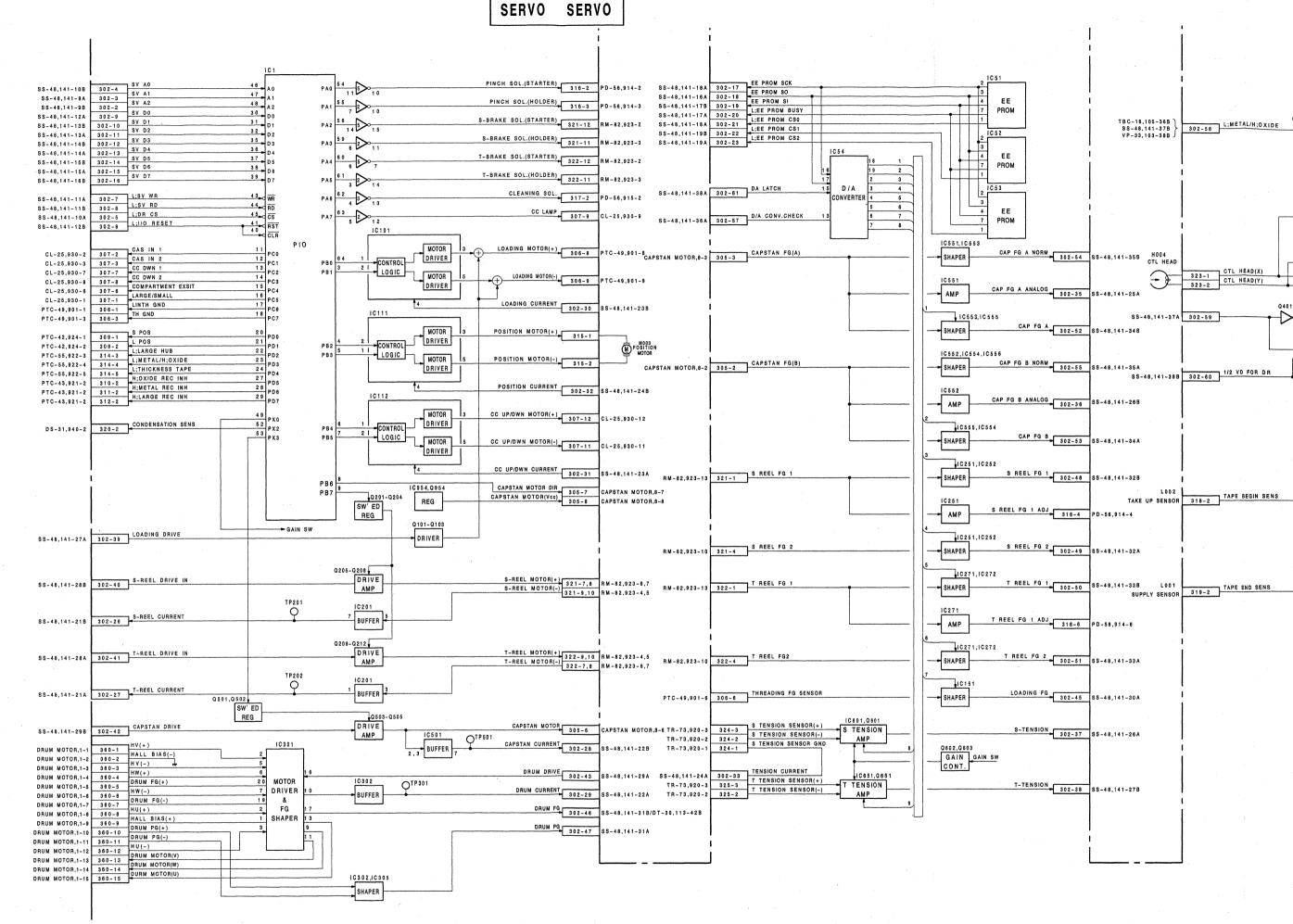


# JYSTEM CONTROL(2)

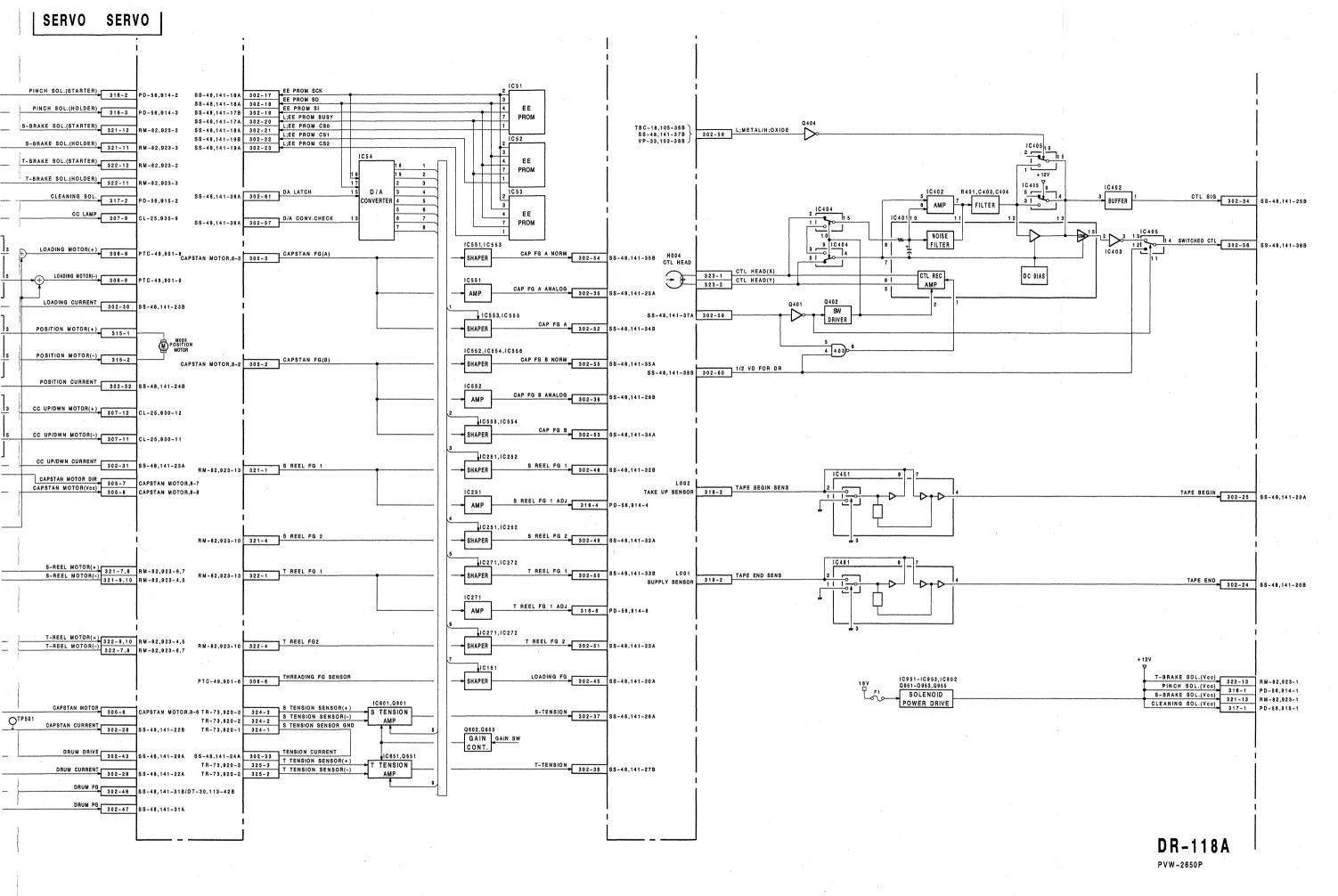




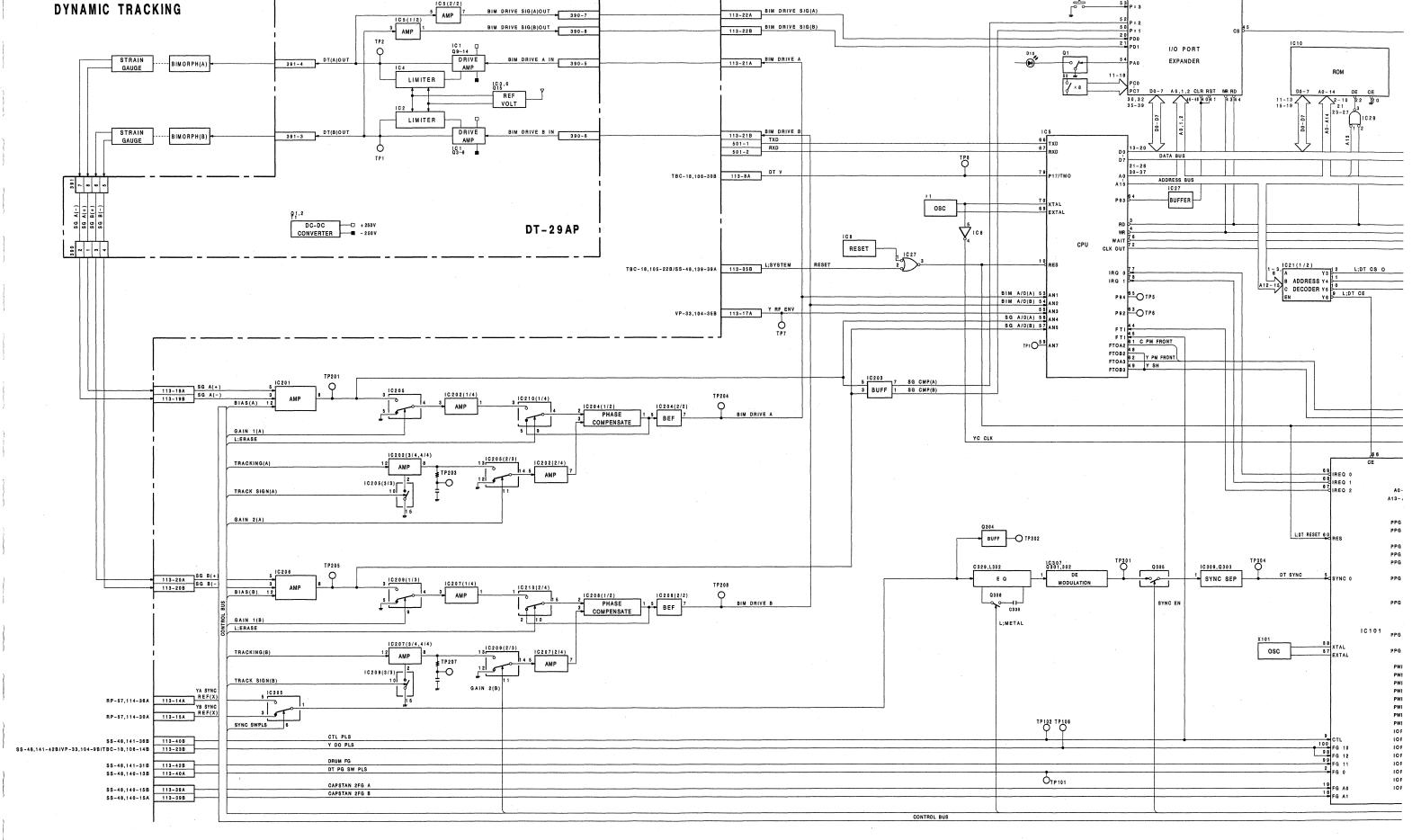


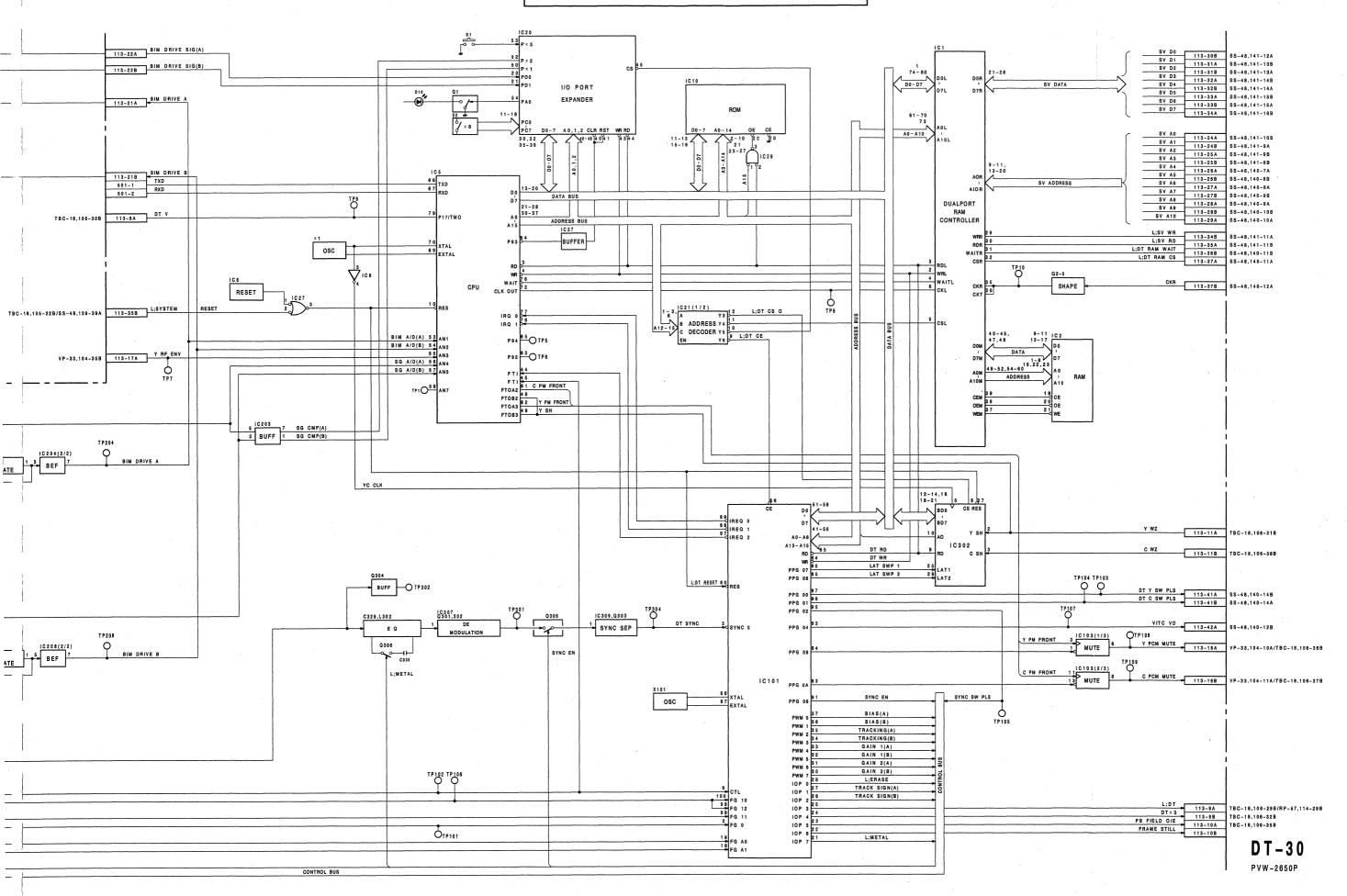


**SERVO** 



14-24





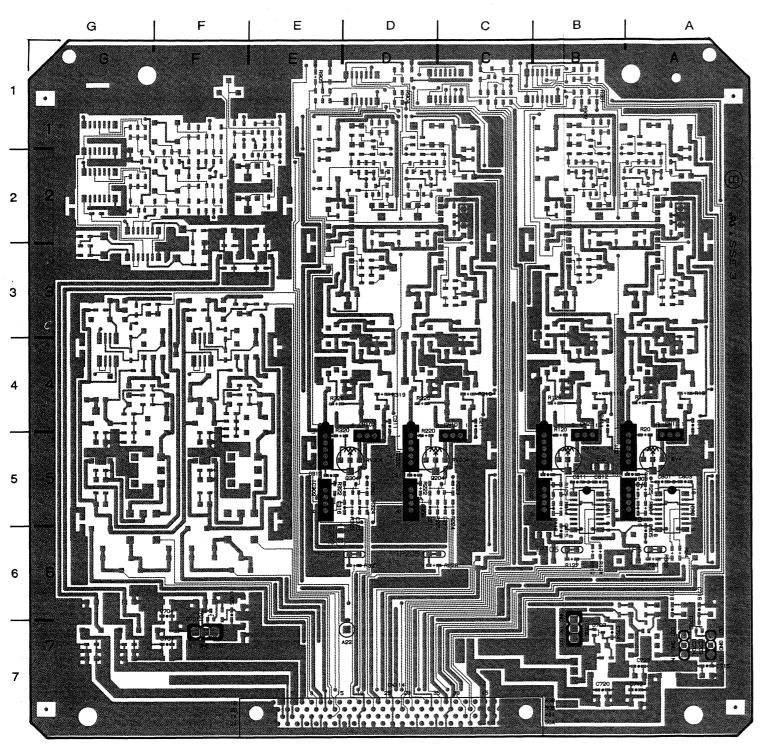
# SECTION 15 BOARD LAYOUT

# **CIRCUIT CONFIGURATION**

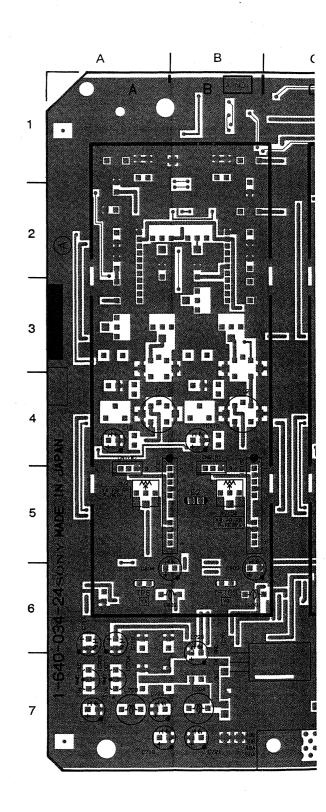
The circuit information is provided below.

System	Board	Circuit Function
	RP-57BP	RF PB Amplifier
	VP-33BP	Y/C PB Process (PB RF EQ, Demod., Encode, Y-RF Envelope
VIDEO		DET), Composite Out Driver
	TBC-18P	Time Base Corrector, CTDM (Expand)
	CP-166A	Output Connector, Component Out Driver
AUDIO	AU-148AP	CH-1 PB Process, Dolby System,
	AU-149AP	CH-2 PB Process, Dolby System
	AU-150A	Mode Control, LTC PB
	CP-167A	Input/Output Connector, Line Out Driver
	DP-138B	Audio Level Meter Back Light
	VR-116B	PB Level Control, Headphone Volume Control
	MA-44B	Meter Driver, Headphone Amplifier
	SS-48P	System Control, Servo System Main, Time Code Reader,
		Character Generator
	DT-29AP	Dynamic Tracking
	DT-30	Dynamic Tracking
	KY-210B	Keyboard
·	DP-139B	Time Code Display
	DR-118A	Motor Driver, Solenoid Driver, Sensor Input, Tension Amplifier, FG Amplifier, CTL PB, Adjust Data Storage
	CL-25	Cassette Compartment (Cassette Loading Begin/Near-end Sensor, LP-57 Connection, Cassette Loading Motor)
SERVO/	DE-15	Reel FG
SYSTEM	DS-31	Condensation Sensor
CONTROL/	HC-14C	Sub-control Panel
TIME CODE	PC-62	Cassette In/Large Cassette Sensor
	PD-56	Pinch/Cleaning Solenoid Connection, Reel FG Check
	PTC-39	Search Dial
	PTC-42	Cassette Size Sensor
	PTC-49	Threading Motor
	PTC-54	Threading FG
	PTC-55	Cassette Information Sensor (Tape Thickness, Reel Hub Diameter,
		Metal/Oxide)
	RM-82	Reel Motor
	RM-93A	TBC Remote Connector
	SW-444B	Select Switch, Indicator, RF/Video Level Meter
	TR-73	S/T Tension Sensor
OTHERS	AC-133	AC Line Filter, Fuse
	DP-159B	RF/Video Meter Back Light
	LP-57	Cassette Illumination
	MB-322B	Mother Board

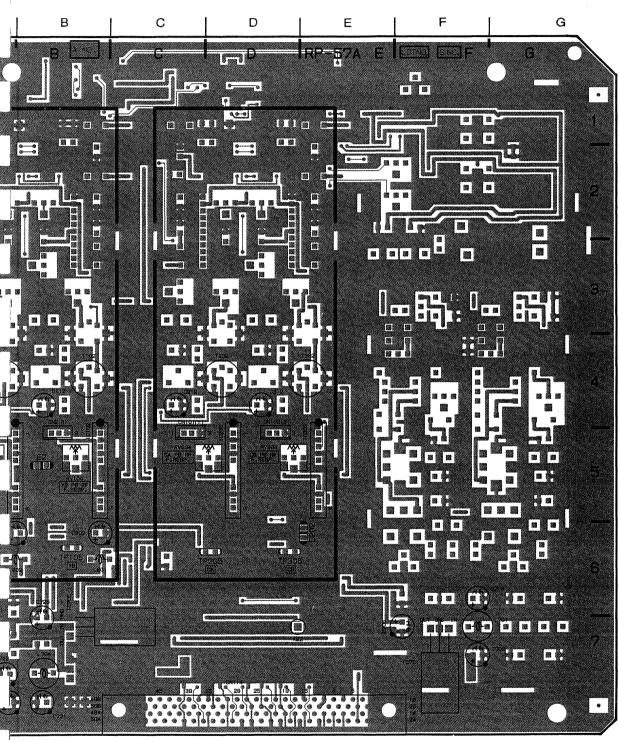
Board	Page
AC-133	15_42
AU-148AP	
AU-149AP	
AU-150A	
A0-130A	15-20
CL-25	15-42
CP-166A	
CP-167A	
DE-15	15-42
DP-138B	
DP-139B	
DP-159B	
DR-118A	
DS-31	
DT-29AP	
DT-30	
HC-14C	15-38
KY-210B	15-34
LP-57	15-42
MA-44B	15-24
MB-322B	15-46
PC-62	
PD-56	
PTC-39	
PTC-42	
PTC-49	
PTC-54	
PTC-55	15-42
RM-82 ·····	
RM-93A	
RP-57BP	15-4
SS-48P	
SW-444B	15-40
TDC 10D	15 10
TBC-18P	
TR-73	15-42
VP-33BP	15 6
VR-116B	15-24



RP-57BP 1-640-034-24 B SIDE



RP-57BP



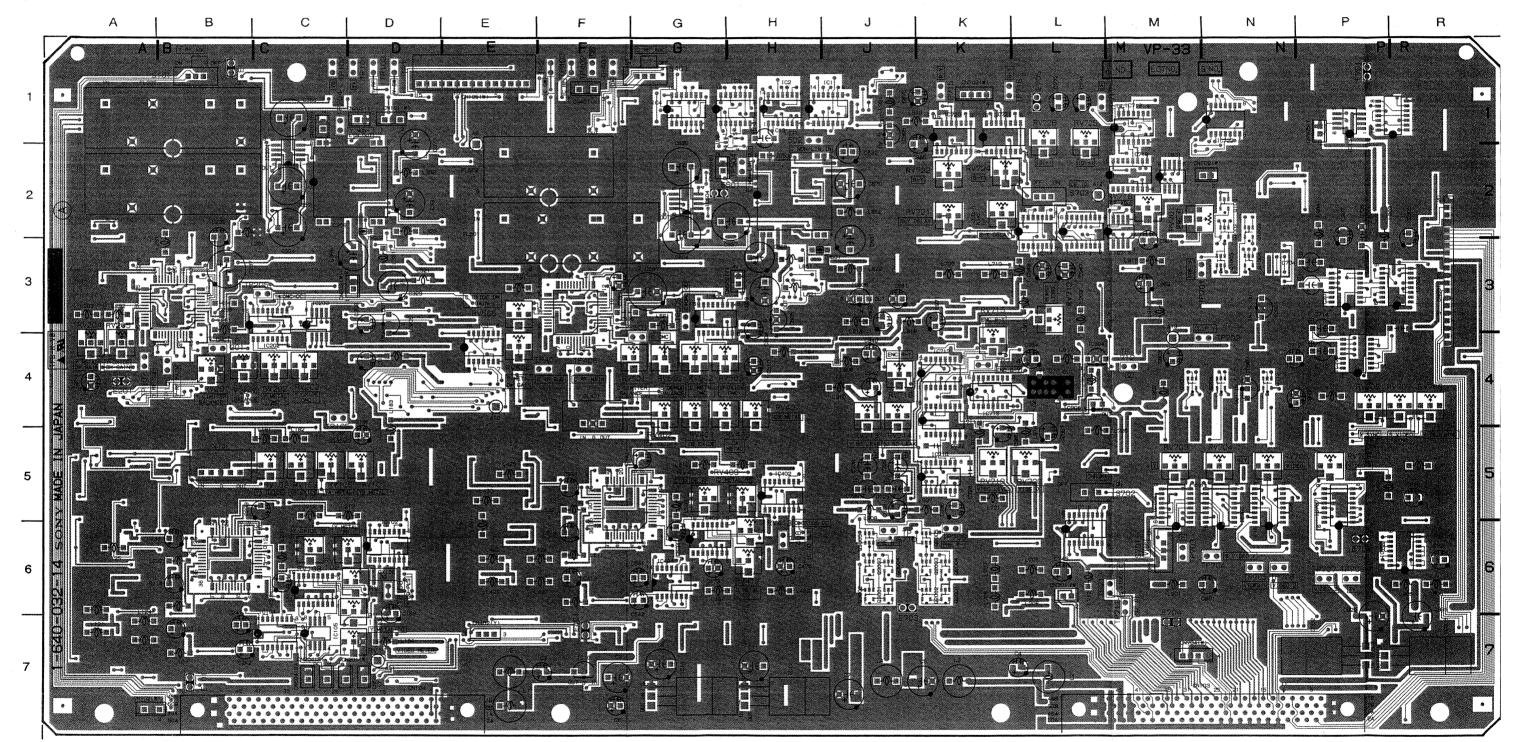
RP-57BP 1-640-034-24 A SIDE

#### RP-57BP(1-640-034-24)

CN1	A-5
CN2	B-5
CN101	C-5
CN102	D-5
CN114	D-7
*D701	F-6
*D702	A-7
*D703	B-7
E2	B-5
E202	E-6
IC2 IC102 IC202 IC302 IC701 IC703 IC704 IC705 *IC801	A-5 B-5 D-5 E-5 F-7 A-7 A-7 B-7 A-5 B-5
L701	F-7
L703	A-7
L704	B-7
L801	B-6
L802	A-6
*Q204	C-5
*Q304	D-5
RV4	A-5
RV104	B-5
RV204	D-5
RV304	D-5
TP5	A-6
TP105	B-6
TP205	D-6
TP305	D-6
T2	A-4
T102	B-4
T202	D-4
T302	E-4

\*; B SIDE

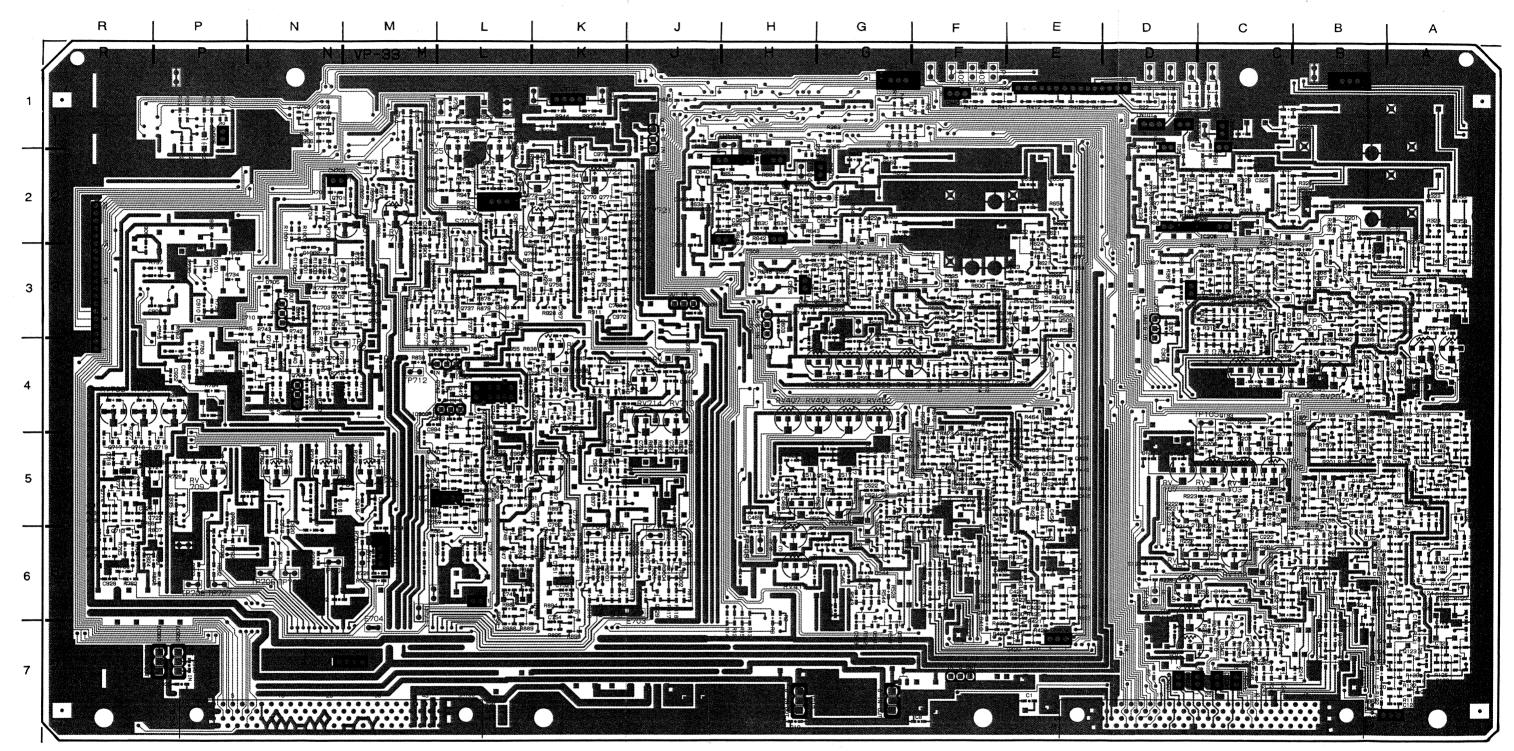
#### 1 -33BP; Y/C PB PROCESS (PB RF EQ, DEMOD, ENCODE, Y-RF ENVELOPE DET), COMPOSITE OUT DRIVER



VP-33BP(1-640-032-14)

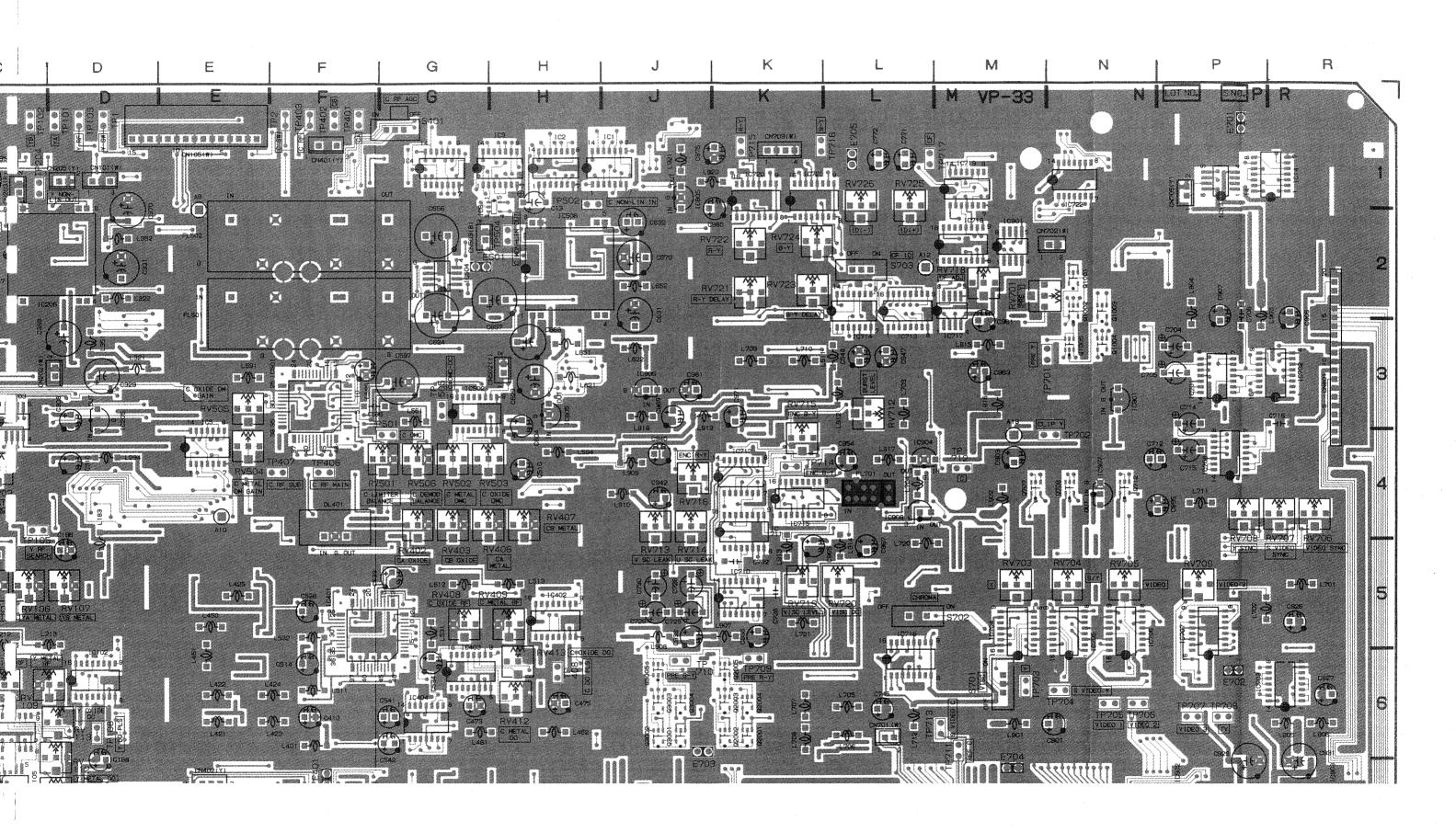
CN101	D-1	IC104	C-7	L294	D-4	*Q164	B-5	*Q550	G-5	*Q761	K-2	RV719	K-5
								4330					N-3
CN102	A-7	IC105	C-7	L321	D-3	*Q165	B-5	*Q552	G-5	*Q762	K-2	RV720	L-5
CN103	N-7	IC201	B-3	L322	D-2	*Q167	B-5	*Q561	G-3	*Q763	L-1	RV721	K-2
CN104	C-7	IC202	B-4	L351	D-3	*Q168	B-5	*Q562	G-3	*Q764	L-1	RV722	K-2
CN105	E-1	IC203	C-4	L352	D-2	*Q169	B-5	*Q563	G-3	*Q765	L-1	RV723	K-2
CN201	C-7	IC204	C-2	L401	F-6	*Q181	A-4	*Q564	G-3	*Q766	L-2	RV724	K-2
CN202	D-3	IC205	D-3	L423	F-6	*Q182	A-5	*Q565	G-3	*Q767	L-2	RV725	
						Q102	7-5	4303					L-1
CN203	C-1	IC206	C-2	L424	F-6	*Q183	A-5	*Q566	G-3	*Q768	N-1	RV726	L-1
CN204	C-7	IC401	F-5	L461	G-6	*Q184	A-4	*Q570	F-4	*Q770	K-2		
CN205	D-1	IC402	H-5	L462	H-6	*Q185	A-5	*Q591	F-3	*Q771	K-2	C101	B-1
										40771		S101	
CN401	F-1	IC403	G-6	L511	F-6	*Q186	A-5	*Q592	E-3	*Q772	L-2	S401	G-1
CN402	E-7	IC404	G-6	L512	G-5	*Q187	B-4	*Q621	E-3	*Q773	K-2	S701	M-6
CN501	D-7	IC501	F-3	L513	H-5	*Q188	B-5	*Q622	G-2	Q1001	N-2	5702	
						*0100							L-5
CN502	H-3	IC502	G-4	L531	G-5	*Q189	B-5	*Q623	H-2	Q1002	N-2	S703	L-2
CN503	G-2	IC506	H-2	L532	F-5	*Q190	B-4	*Q624	H-2	Q1003	N-2		
CN504	C-7	IC605	H-3	L561	G-3	*Q191	B-5	*Q625	H-2	Q1004	N-3	TH301	D-2
CN701	L-6	IC701	P-3	L591	E-3	*Q192					N O		D-2
							C-4	*Q626	H-2	Q1005	N-3	TH601	H-3
CN702	N-2	IC702	R-3	L594	H-4	*Q193	C-4	*Q627	H-2	Q2001	K-6		
CN703	K-1	IC703	R-6	L621	H-3	*Q194	C-5	*Q628	H-2	Q2002	K-6	TP1	D-1
CN704	M-7	IC704	M-6			*0201							
				L622	J-3	*Q201	C-7	*Q629	H-2	Q2003	K-6	TP2	F-1
CN705	P-1	IC705	N-6	L651	H-3	*Q204	A-4	*Q701	N-2	Q2004	K-6	TP101	D-1
CN801	R-3	IC706	N-6	L652	J-2	*Q205	A-4	*Q702	N-3	Q2005	K-6	TP102	C-1
		IC707	P-6	L701	R-5	*Q211	C-5	*Q703	M-3				
D1 444	D =					Q211				Q3001	J-6	TP103	D-1
DL101	B-5	IC708	P-4	L702	P-5	*Q212	C-5	*Q704	M-3	Q3002	J-6	TP105	C-4
DL401	F-4	IC710	K-5	L703	L-3	*Q213	C-6	*Q705	N-3	Q3003	J-6	TP106	B-4
		IC711	K-5	L704	L-4	*Q214	D-6	*Q706	N-4	Q3004	J-6		
*54	c -					Q214						TP107	A-4
*D1	G-7	IC712	K-4	L705	L-6	*Q215	C-6	Q707	M-4	Q3005	J-6	TP108	D-6
*D201	B-2	IC713	L-3	L706	L-6	*Q241	C-7	Q708	N-4			TP201	B-4
*D501	F-3	IC714	L-3	L707	K-6	*Q250	B-6	*Q709	N-4	RV102	C-5	TP204	
						<b>#</b> 0050		<b>40740</b>					C-1
*D502	H-2	IC715	K-4	L708	K-6	*Q252	C-5	*Q710	N-4	RV103	C-5	TP205	C-3
*D701	P-3	IC716	L-6	L709	K-3	*Q261	B-3	*Q711	N-4	RV106	C-5	TP401	F-1
*D702	N-4	IC717	M-3	L710	K-3	*Q262	C-3	Q712	N-4	RV107	D-5	TP402	F-1
						*0060							
*D703	L-2	IC718	M-2	L711	P-4	*Q263	C-3	*Q713	R-6	RV108	C-6	TP403	F-1
*D704	L-2	IC719	M-1	L712	L-6	*Q264	C-3	*Q714	R-5	RV109	C-6	TP406	F-4
*D705	N-3	IC720	K-2	L901	M-6	*Q265	C-3	*Q715	R-6	RV111	D-7	TP407	F-4
*D706	L-4	IC721	K-2	L902	M-4	*0266							
						*Q266	C-3	*Q716	R-5	RV112	D-6	TP408	H-6
*D707	P-6	IC722	N-1	L903	P-2	*Q267	C-3	*Q717	R-5	RV113	D-6	TP501	G-4
*D708	K-4	IC901	N-3	L904	P-2	*Q268	C-3	*Q718	R-5	RV201	B-4	TP502	H-1
*D709	K-4	IC902	P-7	L905	R-6	*Q269	C-3	*Q719	P-5	RV202	C-4	TP504	H-2
5.05						*0270							
		IC903	P-7	L906	R-6	*Q270	B-3	*Q728	K-6	RV203	C-4	TP505	G-3
E1	B-1	IC904	L-4	L907	K-5	*Q291	B-3	*Q729	J-6	RV204	A-4	TP701	N-3
E101	B-7	IC905	J-1	L908	J-5	*Q292	A-3	*Q730	K-4	RV205	A-4	TP702	N-4
E201	A-4	IC906	J-3	L909	J-4	*Q293	A-3	*Q731	K-4	RV206	B-4		
						Q293						TP703	M-6
E401	F-7	IC907	N-4	L910	J-4	*Q294	A-3	*Q732	K-4	RV402	G-4	TP704	N-6
E501	G-2	IC908	L-4	L911	L-3	*Q301	C-3	*Q733	K-4	RV403	G-4	TP705	N-6
E701	P-1			L912	L-3	*Q321	A-3	*Q734	L-3	RV406	G-4	TP706	N-6
		1.1	F 7			*022							
E702	P-6	L1	E-7	L913	K-5	*Q322	C-2	*Q735	M-3	RV407	H-4	TP707	P-6
E703	J-6	L2	L-7	L914	L-5	*Q323	C-2	*Q736	M-3	RV408	G-5	TP708	P-6
E704	M-7	L3	K-7	L915	M-3	*Q324	C-2	*Q737	L-3	RV409	H-5	TP709	K-6
		L4	)-7			*A22E							
E705	L-1			L916	M-3	*Q325	D-2	*Q738	L-3	RV412	H-6	TP710	J-6
		L5	E-7	L917	L-4	*Q326	D-2	*Q739	L-4	RV413	H-6	TP711	M-6
FL201	B-2	L101	B-7	L918	J-3	*Q327	C-2	*Q740	L-5	RV501	G-4	TP712	M-4
FL202	B-1	L121	A-7	L919	J-3	*Q328	C-2	*Q741	L-5	RV502	G-4		
						<b>4020</b>						TP713	L-6
FL501	F-2	L122	A-6	L920	J-1	*Q329	D-2	*Q742	L-5	RV503	G-4	TP714	K-4
FL701	L-4	L123	A-7	L921	J-1	*Q351	A-3	*Q743	L-5	RV505	E-3	TP715	K-1
		L124	A-7			*Q352	C-1	*Q746	L-6	RV506	G-4	TP716	K-1
101	11.4			***	n 4	<b>4032</b>		40740					
IC1	H-1	L125	A-6	*Q20	P-1	*Q420	E-7	*Q747	L-6	RV701	M-2	TP717	L-1
IC2	H-1	L181	C-5	*Q120	A-7	*Q423	E-6	*Q748	L-6	RV703	M-5		
IC3	G-1	L182	C-5	*Q121	A-7	*Q424	E-6	*Q749	K-6	RV704	N-5		
IC4	G-1	L183	D-5	*Q122	A-6	*Q425	F-6	*Q750	K-6	RV705			
								- Q150			N-5		
IC5	E-4	L184	D-7	*Q123	A-7	*Q426	F-5	*Q751	K-7	RV706	R-4		
IC6	H-1	L211	B-6	*Q124	A-6	*Q464	F-5	*Q752	K-5	RV707	R-4		
IC10	F-7	L212	C-5	*Q125	A-6	*Q466	F-5	*Q753	K-3	RV708	P-4		
	C 7			40100				- W133					
IC11	G-7	L213	C-5	*Q126	A-6	*Q467	F-5	*Q754	K-3	RV709	P-5		
IC12	H-7	L231	C-6	*Q127	A-6	*Q468	F-5	*Q755	K-3	RV712	L-3		
IC13	P-1	L232	B-6	*Q128	A-5	*Q501	G-7	*Q756	K-2	RV713	J-4		
	L-1			4120									
		1 261	R 2	*^1E1									
IC14	R-1	L261	B-3	*Q151	A-5	*Q513	G-5	*Q757	K-2	RV714	J-4		
IC14 IC101	R-1 B-6	L291	B-3	*Q161	A-5	*Q514	H-5	*Q758	K-3	RV715	K-4		
IC14 IC101 IC102	R-1		B-3			*Q514	H-5	*Q758	K-3	RV715	K-4		
IC14 IC101	R-1 B-6	L291		*Q161	A-5	*Q513 *Q514 *Q515 *Q541		*Q757 *Q758 *Q759 *Q760					

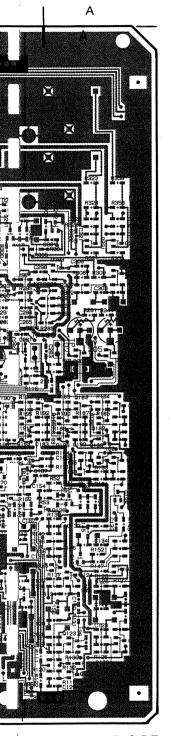
## V 33BP ; Y/C PB PROCESS (PB RF EQ, DEMOD, ENCODE, Y-RF ENVELOPE DET), COMPOSITE OUT DRIVER



VP-33BP VP-33BP

### CODE, Y-RF ENVELOPE DET), COMPOSITE OUT DRIVER



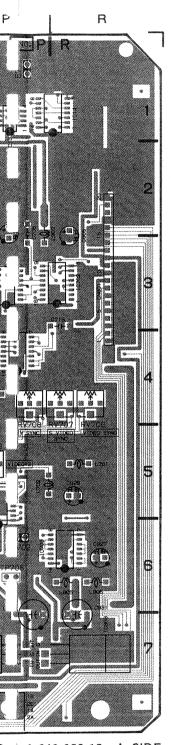


1-640-032-14 B SIDE

VP-33BP VP-33BP

VP-33BP	(1-640-0	32-14)															
CN101	D-1	IC104	C-7	L294	D-4	*Q1	54 E	3-5		*Q550	G-5	*Q761	K-2		RV719 RV720	K-5 L-5	
CN102 CN103	A-7 N-7	IC105 IC201	C-7 B-3	L321 L322	D-3 D-2	*Q1 *Q1	)5 E	3-5 3-5		*Q552 *Q561	G-5 G-3	*Q762 *Q763	K-2 L-1		RV720 RV721	K-2	
CN103	C-7	IC201	B-4	L351	D-2 D-3	*Q1	58 E	3-5 3-5		*Q562	G-3	*Q764	L-1		RV722	K-2	
CN105	Ĕ-1	IC203	C-4	L352	D-2	*Q1	69 E	B-5		*Q563	G-3	*Q765	L-1		RV723	K-2	
CN201	C-7	IC204	C-2	L401	F-6	*Q1	81 A	4-4		*Q564	G-3	*Q766	L-2		RV724	K-2	
CN202	D-3	IC205	D-3	L423	F-6	*Q1		4-5		*Q565	G-3	*Q767	L-2	. •	RV725	L-1	
CN203	C-1	IC206	C-2	L424	F-6	*Q1		۸-5		*Q566	G-3	*Q768	N-1		RV726	L-1	
CN204 CN205	C-7 D-1	IC401 IC402	F-5 H-5	L461 L462	G-6 H-6	*Q1 *Q1	34 <i>A</i> 85 <i>I</i>	4-4 4-5		*Q570 *Q591	F-4 F-3	*Q770 *Q771	K-2 K-2		S101	B-1	
CN401	F-1	IC402	G-6	L511	F-6	*Q1		4-5		*Q592	E-3	*Q772	L-2		S401	G-1	
CN402	E-7	IC404	G-6	L512	G-5	*Q1	87 E	B-4		*Q621	E-3	*Q773	K-2		S701	M-6	
CN501	D-7	IC501	F-3	L513	H-5	*Q1	88 E	B-5		*Q622	G-2	Q1001	N-2		S702	L-5	
CN502	H-3	IC502	G-4	L531	G-5	*Q1	39 E	B-5		*Q623	H-2	Q1002	N-2		S703	L-2	
CN503	G-2 C-7	IC506 IC605	H-2 H-3	L532 L561	F-5 G-3	*Q1 *Q1	30 E	B-4 B-5		*Q624 *Q625	H-2 H-2	Q1003 Q1004	N-2 N-3		TH301	D-2	
CN504 CN701	L-6	IC701	P-3	L501 L591	G-3 E-3	*Q1	42 (	5-5 C-4		*Q626	H-2	Q1004 Q1005	N-3		TH601	H-3	
CN702	N-2	IC702	R-3	L594	H-4	*Q1	93 (	C-4		*Q627	H-2	Q2001	K-6		11.002		
CN703	K-1	IC703	R-6	L621	H-3	*Q1	94 C	C-5		*Q628	H-2	Q2002	K-6		TP1	D-1	
CN704	M-7	IC704	M-6	L622	J-3	*Q2	)1 (	C-7		*Q629	H-2	Q2003	K-6		TP2	F-1	
CN705	P-1	IC705	N-6	L651	H-3	*Q2	)4 A	A-4		*Q701	N-2	Q2004	K-6		TP101	D-1	
CN801	R-3	IC706 IC707	N-6 P-6	L652 L701	J-2 R-5	*Q2 *Q2	J5 A	A-4 C-5		*Q702 *Q703	N-3 M-3	Q2005 Q3001	K-6 J-6		TP102 TP103	C-1 D-1	
DL101	B-5	IC707	P-4	L701	P-5	*Q2	12 (	C-5		*Q704	M-3	Q3001 Q3002	J-6		TP105	C-4	
DL401	F-4	IC710	K-5	L703	L-3	*Q2	13	C-6		*Q705	N-3	Q3003	J-6		TP106	B-4	
		IC711	K-5	L704	L-4	*Q2	14 [	D-6		*Q706	N-4	Q3004	J-6		TP107	A-4	
*D1	G-7	IC712	K-4	L705	L-6	*Q2	15 (	C-6		Q707	M-4	Q3005	J-6		TP108	D-6	
*D201	B-2	IC713	L-3	L706	L-6	*Q2	41 C	C-7		Q708	N-4	D\/102	C-5		TP201 TP204	B-4 C-1	
*D501 *D502	F-3 H-2	IC714 IC715	L-3 K-4	L707 L708	K-6 K-6	*Q2 *Q2	50 E	B-6 C-5		*Q709 *Q710	N-4 N-4	RV102 RV103	C-5 C-5		TP205	C-3	
*D701	P-3	IC716	L-6	L709	K-3	*Q2	51 F	B-3		*Q711	N-4	RV105	C-5		TP401	F-1	
*D702	N-4	IC717	M-3	L710	K-3	*Q2	62 C	C-3		Q712	N-4	RV107	D-5		TP402	F-1	
*D703	L-2	IC718	M-2	L711	P-4	*Q2	63 C	C-3		*Q713	R-6	RV108	C-6		TP403	F-1	
*D704	L-2	IC719	M-1	L712	L-6	*Q2	54 (	C-3		*Q714	R-5	RV109	C-6		TP406	F-4	
*D705 *D706	N-3 L-4	IC720 IC721	K-2 K-2	L901 L902	M-6 M-4	*Q2 *Q2	55 C	C-3 C-3		*Q715 *Q716	R-6 R-5	RV111 RV112	D-7 D-6		TP407 TP408	F-4 H-6	
*D700	P-6	IC721	N-1	L902 L903	P-2	*Q2	50 C	C-3 C-3		*Q717	R-5	RV112	D-6		TP501	G-4	
*D708	K-4	IC901	N-3	L904	P-2	*Q2	58 (	C-3		*Q718	R-5	RV201	B-4		TP502	H-1	
*D709	K-4	IC902	P-7	L905	R-6	*Q2	69 C	C-3		*Q719	P-5	RV202	C-4		TP504	H-2	
:		IC903	P-7	L906	R-6	*Q2	70 E	B-3		*Q728	K-6	RV203	C-4		TP505	G-3	
E1	B-1	IC904 IC905	L-4	L907	K-5	*Q2	91 E	B-3		*Q729 *Q730	J-6 K-4	RV204 RV205	A-4		TP701 TP702	N-3 N-4	
E101 E201	B-7 A-4	IC905	J-1 J-3	L908 L909	J-5 J-4	*Q2 *Q2	92 P	A-3 A-3		*Q731	K-4 K-4	RV205 RV206	A-4 B-4		TP703	M-6	
E401	F-7	IC907	N-4	L910	J-4	*Q2	94 /	A-3		*Q732	Ĥ-4	RV402	G-4		TP704	N-6	
E501	G-2	IC908	L-4	L911	L-3	*Q3	01 (	C-3		*Q733	K-4	RV403	G-4		TP705	N-6	
E701	P-1			L912	L-3	*Q3	21 A	A-3		*Q734	L-3	RV406	G-4		TP706	N-6	
E702 E703	P-6 J-6	L1 L2	E-7 L-7	L913 L914	K-5 L-5	*Q3 *Q3	22 (	C-2 C-2		*Q735 *Q736	M-3 M-3	RV407 RV408	H-4 G-5		TP707 TP708	P-6 P-6	
E703	J-0 M-7	L3	K-7	L914 L915	M-3	*Q3	23 (	C-2 C-2		*Q737	L-3	RV409	H-5		TP709	K-6	
E705	L-1	L4	J-7	L916	M-3	*Q3	25 Γ	D-2		*Q738	L-3	RV412	H-6		TP710	J-6	
		L5	E-7	L917	L-4	*Q3	26 E	D-2		*Q739	L-4	RV413	H-6		TP711	M-6	
FL201	B-2	L101	B-7	L918	J-3	*Q3	27 (	C-2		*Q740	L-5	RV501	G-4		TP712	M-4	
FL202	B-1 F-2	L121 L122	A-7	L919	J-3	*Q3 *Q3	28 ( 20 [	C-2		*Q741 *Q742	L-5	RV502 RV503	G-4 G-4		TP713 TP714	L-6 K-4	
FL501 FL701	F-2 L-4	L122	A-6 A-7	L920 L921	J-1 J-1	*Q3	29 L 51 /	D-2 A-3		*Q743	L-5 L-5	RV505	E-3		TP715	K-1	
1 2/01		L124	A-7	L321	J-1	*Q3	52 (	C-1		*Q746	L-6	RV506	G-4		TP716	K-1	
IC1	H-1	L125	A-6	*Q20	P-1	*Q4	20 E	E-7		*Q747	L-6	RV701	M-2		TP717	L-1	
IC2	H-1	L181	C-5	*Q120	A-7	*Q4	23 F	E-6		*Q748	L-6	RV703	M-5				
IC3	G-1	L182	C-5	*Q121	A-7	*Q4	24 E	E-6		*Q749	K-6	RV704	N-5				
IC4 IC5	G-1 E-4	L183 L184	D-5 D-7	*Q122 *Q123	A-6 A-7	*Q4 *Q4	25 F	F-6 F-5	-	*Q750 *Q751	K-6 K-7	RV705 RV706	N-5 R-4				
IC6	H-1	L211	B-6	*Q124	A-6	*Q4	64 F	F-5		*Q752	K-5	RV707	R-4				
IC10	F-7	L212	C-5	*Q125	A-6	*Q4	66 F	F-5		*Q753	K-3	RV708	P-4				
IC11	G-7	L213	C-5	*Q126	A-6	*Q4	67 F	F-5		*Q754	K-3	RV709	P-5				
IC12	H-7	L231	C-6	*Q127	A-6	*Q4	58 F	F-5		*Q755	K-3	RV712	L-3				
IC13 IC14	P-1 R-1	L232 L261	B-6 B-3	*Q128 *Q151	A-5 A-5	*Q5 *Q5	JI (	G-7 G-5		*Q756 *Q757	K-2 K-2	RV713 RV714	J-4 J-4				
IC14 IC101	B-6	L201 L291	B-3	*Q151	A-5 A-5	*Q5	14	о-э H-5		*Q758	K-2	RV714 RV715	J-4 K-4				
IC102	D-6	L292	A-3	*Q162	A-5	*Q5	15 (	G-6		*Q759	K-3	RV716	J-4				
IC103	C-6	L293	A-3	*Q163	A-5	*Q5	41 (	G-7		*Q760	K-3	RV718	M-2				

\*: B side



1-640-032-13 A SIDE

VP-33BP VP-33BP

VP-33BF	P(1-640-032-1	.3)										
CN101 CN102	D-1 A-7	IC203 IC204	C-4 C-2	L352 L401	D-2 F-6	*Q169 *Q181	B-5 A-4	*Q622 *Q623	G-2 H-2	Q1001 Q1002	N-2 N-2	
CN102	N-7	IC204	D-3	L423	F-6	*Q182	A-5	*Q624	H-2	Q1003	N-2	
CN104	C-7	IC206	C-2	L424	F-6	*Q183	A-5	*Q625	H-2	Q1004	N-3	
CN105	E-1	IC401	F-5	L461	G-6	*Q184	A-4	*Q626	H-2	Q1005	N-3	
CN203	C-1	IC402	H-5	L462	H-6	*Q185	A-5	*Q627	H-2	Q2001	K-6	
CN204 CN205	C-7 D-1	IC403 IC404	G-6 G-6	L511 L512	F-6 G-5	*Q186 *Q187	A-5 B-4	*Q628 *Q629	H-2	Q2002 Q2003	K-6 K-6	
CN205	D-1 F-1	IC404	F-3	L512	H-5	*Q187	B-4 B-5	*Q701	H-2 N-2	Q2003 Q2004	K-6	
CN402	E-7	IC502	G-4	L531	G-5	*Q189	B-5	*Q702	N-3	Q2005	K-6	
CN503	G-2	IC506	H-2	L532	F-5	*Q190	B-4	*Q703	M-3	Q3001	J-6	
CN504	C-7	IC605	H-3	L561	G-3	*Q191	B-5	*Q704	M-3	Q3002	J-6	
CN701	L-6	IC701	P-3	L591	E-3	*Q192	C-4	*Q705	N-3	Q3003	J-6	
CN702 CN703	N-2 K-1	IC702 IC703	R-3 R-6	L594 L621	H-4 H-3	*Q193 *Q194	C-4 C-5	*Q706 Q707	N-4 M-4	Q3004 Q3005	J-6 J-6	
CN703	M-7	IC703	M-6	L622	J-3	*Q201	C-3 C-7	Q708	N-4	<b>Q</b> 3003	3-0	
CN705	P-1	IC705	N-6	L651	H-3	*Q204	A-4	*Q709	N-4	RV102	C-5	
CN801	R-3	IC706	N-6	L652	J-2	*Q205	A-4	*Q710	N-4	RV103	C-5	
	_ :	IC707	P-6	L701	R-5	*Q211	C-5	*Q711	N-4	RV106	C-5	
DL101	B-5	IC708	P-4	L702	P-5	*Q212 *Q213	C-5 C-6	Q712 *Q713	N-4	RV107	D-5 C-6	
DL401	F-4	IC710 IC711	K-5 K-5	L703 L704	L-3 L-4	*Q213	D-6	*Q714	R-6 R-5	RV108 RV109	C-6	
*D1	G-7	IC712	K-4	L705	L-6	*Q215	C-6	*Q715	R-6	RV111	D-7	
*D201	B-2	IC713	L-3	L706	L-6	*Q241	C-7	*Q716	R-5	RV112	D-6	
*D501	F-3	IC714	L-3	L707	K-6	*Q250	B-6	*Q717	R-5	RV113	D-6	
*D502	H-1	IC715	K-4	L708	K-6	*Q252	C-5	*Q718	R-5	RV201	B-4	
*D701 *D702	P-3 N-4	IC716 IC717	L-6 M-3	L709 L710	K-3 K-3	*Q261 *Q262	B-3 C-3	*Q719 *Q728	P-5 K-6	RV202 RV203	C-4 C-4	
*D702	L-2	IC718	M-2	L711	P-4	*Q263	C-3	*Q729	J-6	RV204	A-4	
*D704	L-2	IC719	M-1	L712	L-6	*Q264	C-3	*Q730	K-4	RV205	A-4	
*D705	N-3	IC720	K-2	L901	M-6	*Q265	C-3	*Q731	K-4	RV206	B-4	
*D706	L-4	IC721	K-2	L902	M-4	*Q266	C-3	*Q732	K-4	RV402	G-4	
*D707 *D708	P-6 K-4	IC722 IC901	N-1 N-3	L903 L904	P-2 P-2	*Q270 *Q291	B-3 B-3	*Q733 *Q734	K-4 L-3	RV403 RV406	G-4 G-4	
*D708	K-4	IC901	P-7	L905	R-6	*Q291	A-3	*Q735	M-3	RV400	H-4	
5,03		IC903	P-7	L906	R-6	*Q293	A-3	*Q736	M-3	RV408	G-5	
E1	B-1	IC904	L-4	L907	K-5	*Q294	A-3	*Q737	L-3	RV409	H-5	
E101	B-7	IC905	J-1	L908	J-5	*Q321	A-3	*Q738	L-3	RV412	H-6	
E201 E401	A-4 F-7	IC906 IC907	J-3 N-4	L909 L910	J-4 J-4	*Q322 *Q323	C-2 C-2	*Q739 *Q740	L-4 L-5	RV413 RV501	H-6 G-4	
E501	G-2	IC907	L-4	L911	L-3	*Q324	C-2 C-2	*Q741	L-5 L-5	RV501	G-4 G-4	
E701	P-1	10300		L912	L-3	*Q325	D-2	*Q742	L-5	RV503	G-4	
E702	P-6	L1	E-7	L913	K-5	*Q326	D-2	*Q743	L-5	RV505	E-3	
E703	J-6	L2	L-7	L914	L-5	*Q327	C-2	*Q746	L-6	RV506	G-4	
E704 E705	M-6 L-1	L3 L4	K-7 J-7	L915 L916	M-3 M-3	*Q328 *Q329	C-2 D-2	*Q747 *Q748	L-6 L-6	RV701 RV703	M-2 M-5	
L/03	L-1	L5	E-7	L917	L-4	*Q351	A-3	*Q749	K-6	RV703	N-5	
FL201	B-2	L101	B-7	L918	J-3	*Q352	C-1	*Q750	K-6	RV705	N-5	
FL202	B-1	L121	A-7	L919	J-3	*Q420	E-7	*Q751	K-7	RV706	R-4	
FL501	F-2	L122	A-6	L920	J-1	*Q423	E-6	*Q752	K-5	RV707	R-4	
FL701	L-4	L123 L124	A-7 A-6	L921	J-1	*Q424 *Q425	E-6 F-6	*Q753 *Q754	K-3 K-3	RV708 RV709	P-4 P-5	
IC1	H-1	L125	A-6	*Q20	P-1	*Q426	F-5	*Q755	K-3	RV712	L-3	
IC2	H-1	L181	C-5	*Q120	A-7	*Q464	F-5	*Q756	K-2	RV713	J-4	
IC3	G-1	L182	C-5	*Q121	A-7	*Q466	F-5	*Q757	K-2	RV714	J-4	
IC4 IC5	G-1 E-4	L183 L184	D-5 D-7	*Q122 *Q123	A-6 A-7	*Q467 *Q468	F-5 F-5	*Q758 *Q759	K-3 K-3	RV715 RV716	K-4	
IC6	G-2	L211	B-6	*Q123	A-6	*Q501	G-7	*Q760	K-3	RV718	J-4 M-2	
IC10	F-7	L212	C-5	*Q125	A-6	*Q513	G-5	*Q761	K-2	RV719	K-5	
IC11	G-7	L213	C-5	*Q126	A-6	*Q514	H-5	*Q762	K-2	RV720	L-5	
IC12	H-7	L231	C-6	*Q127	A-6	*Q515	G-6	*Q763	L-1	RV721	K-2	
IC13 IC14	P-1 R-1	L232 L261	B-6 B-3	*Q128 *Q151	A-5 A-5	*Q541 *Q550	G-7 G-5	*Q764 *Q765	L-1 L-1	RV722 RV723	K-2 K-2	
IC14	B-6	L201	B-3	*Q151	A-5	*Q552	G-5	*Q766	L-1 L-2	RV724	K-2 K-2	
IC102	D-6	L292	A-3	*Q162	A-5	*Q561	G-3	*Q767	L-2	RV725	L-1	
IC103	C-6	L293	A-3	*Q163	A-5	*Q563	G-3	*Q768	N-1	RV726	L-1	
IC104	C-7	L294	D-4	*Q164	B-5	*Q570	F-4	*Q770	K-2	C101	D 4	
IC105 IC201	C-7 B-3	L321 L322	D-3 D-2	*Q165 *Q167	B-5 B-5	*Q591 *Q592	F-3 E-3	*Q771 *Q772	K-2 L-2	S101 S401	B-1 G-1	
IC201	B-4	L351	D-2 D-3	*Q167	B-5	*Q621	E-3	*Q773	K-2	S701	M-6	
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S702 S703

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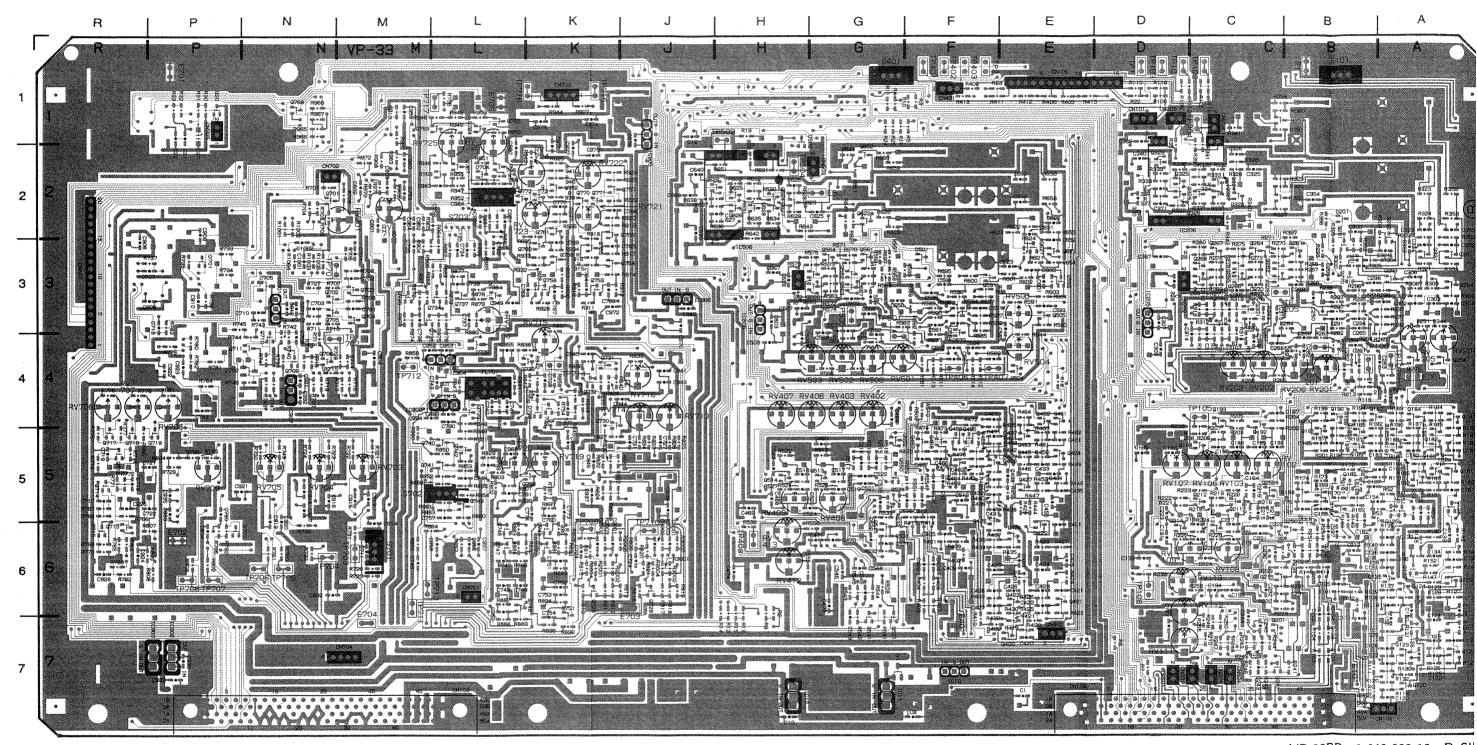
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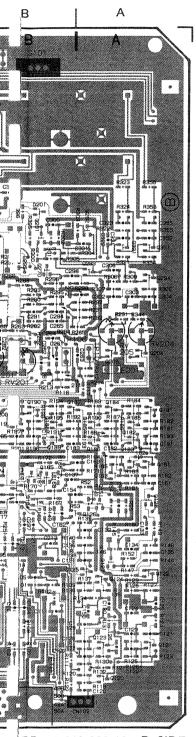
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D-1 F-1 D-1 C-1 D-1 C-4 B-4 D-6 B-4 C-1 C-3 F-1 F-1 F-1

\*; B SIDE

## 7F 3BP; Y/C PB PROCESS (PB RF EQ, DEMOD, ENCODE, Y-RF ENVELOPE DET), COMPOSITE OUT DRIVER





BP 1-640-032-13 B SIDE

VP-33BP VP-33BP

VP-33BP(1-640-032-13)							
CN101	D-1						
CN102	A-7						
CNITOO	AL T						

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CN101	D-1		IC203	C-4	L352	D-2		*Q169	B-5	*Q622	G-2	Q1001	N-2	
CN102	A-7		IC204	C-2	L401	F-6		*Q181	A-4	*Q623	H-2	Q1002	N-2	
CN103	N-7		IC205	D-3	L423	F-6		*Q182	A-5	*Q624	H-2	Q1003	N-2	
CN104	C-7		IC206	C-2	L424	F-6		*Q183	A-5	*Q625	H-2	Q1004	N-3	
CN105	E-1		IC401	F-5	L461	G-6		*Q184	A-4	*Q626	H-2	Q1005	N-3	
CN203	C-1		IC402	H-5	L462	H-6		*Q185	A-5	*Q627	H-2	Q2001	K-6	
CN204	C-7		IC403	G-6	L511	F-6		*Q186	A-5	*Q628	H-2	Q2002	K-6	
CN205	D-1		IC404	G-6	L512	G-5		*Q187	B-4	*Q629	H-2	Q2003	K-6	
CN401	F-1		IC501	F-3	L513	H-5		*Q188	B-5	*Q701	N-2	Q2004	K-6	
CN402	E-7		IC502	G-4	L531	G-5		*Q189	B-5	*Q702	N-3	Q2005	K-6	
CN503	G-2		IC506	H-2	L532	F-5		*Q190	B-4	*Q703	M-3	Q3001	J-6	
CN504	C-7		IC605	H-3	L561	G-3		*Q191	B-5	*Q704	M-3	Q3002	J-6	
CN701	L-6		IC701	P-3	L591	E-3		*Q192	C-4	*Q705	N-3	Q3003	J-6	
CN702	N-2		IC702	R-3	L594	H-4		*Q193	C-4	*Q706	N-4	Q3004	J-6	
CN703	K-1		IC703	R-6	L621	H-3		*Q194	C-5	Q707	M-4	Q3005	J-6	
CN704	M-7		IC704	M-6	L622	J-3		*Q201	C-7	Q708	N-4	D) (100	<i>-</i> -	
CN705 CN801	P-1 R-3		IC705 IC706	N-6 N-6	L651 L652	H-3 J-2		*Q204 *Q205	A-4 A-4	*Q709 *Q710	N-4	RV102	C-5	
CIVOUI	1/-2		IC707	P-6	L701	R-5		*Q203	C-5	*Q710	N-4 N-4	RV103 RV106	C-5 C-5	
DL101	B-5		IC708	P-4	L701	P-5		*Q211	C-5	Q711	N-4 N-4	RV100	D-5	
DL101	F-4		IC710	K-5	L702	L-3		*Q212	C-6	*Q713	R-6	RV107	C-6	
DL401	1-4		IC711	K-5	L703	L-3 L-4		*Q214	D-6	*Q714	R-5	RV108	C-6	
*D1	G-7		IC712	K-4	L705	L-6		*Q215	C-6	*Q715	R-6	RV103	D-7	
*D201	B-2		IC713	L-3	L706	L-6		*Q241	C-7	*Q716	R-5	RV112	D-6	
*D501	F-3		IC714	L-3	L707	K-6		*Q250	B-6	*Q717	R-5	RV113	D-6	
*D502	H-1		IC715	K-4	L708	K-6		*Q252	C-5	*Q718	R-5	RV201	B-4	
*D701	P-3		IC716	L-6	L709	K-3		*Q261	B-3	*Q719	P-5	RV202	C-4	
*D702	N-4		IC717	M-3	L710	K-3		*Q262	C-3	*Q728	K-6	RV203	C-4	
*D703	L-2		IC718	M-2	L711	P-4		*Q263	C-3	*Q729	J-6	RV204	A-4	
*D704	L-2		IC719	M-1	L712	L-6		*Q264	C-3	*Q730	K-4	<b>RV205</b>	A-4	
*D705	N-3		IC720	K-2	L901	M-6		*Q265	C-3	*Q731	K-4	RV206	B-4	
*D706	L-4		IC721	K-2	L902	M-4		*Q266	C-3	*Q732	K-4	<b>RV402</b>	G-4	
*D707	P-6		IC722	N-1	L903	P-2		*Q270	B-3	*Q733	K-4	RV403	G-4	
*D708	K-4		IC901	N-3	L904	P-2		*Q291	B-3	*Q734	L-3	RV406	G-4	
*D709	K-4		IC902	P-7	L905	R-6		*Q292	A-3	*Q735	M-3	RV407	H-4	
E1	B-1		IC903 IC904	P-7	L906	R-6		*Q293	A-3	*Q736	M-3	RV408	G-5	
E101	B-1 B-7		IC904	L-4 J-1	L907 L908	K-5 J-5		*Q294 *Q321	A-3 A-3	*Q737 *Q738	L-3 L-3	RV409 RV412	H-5	
E201	A-4		IC906	J-3	L909	J-3 J-4		*Q321	C-2	*Q739	L-3 L-4	RV412 RV413	H-6 H-6	
E401	F-7		IC907	N-4	L910	J-4		*Q323	C-2	*Q740	L-5	RV501	G-4	
E501	G-2		IC908	L-4	L911	L-3		*Q324	C-2	*Q741	L-5	RV502	G-4	
E701	P-1				L912	L-3		*Q325	D-2	*Q742	L-5	RV503	G-4	
E702	P-6		L1	E-7	L913	K-5		*Q326	D-2	*Q743	L-5	RV505	E-3	
E703	J-6		L2	L-7	L914	L-5		*Q327	C-2	*Q746	L-6	RV506	G-4	
E704	M-6		L3	K-7	L915	M-3		*Q328	C-2	*Q747	L-6	RV701	M-2	
E705	L-1		L4	J-7	L916	M-3		*Q329	D-2	*Q748	L-6	RV703	M-5	
			L5	E-7	L917	L-4		*Q351	A-3	*Q749	K-6	RV704	N-5	
FL201	B-2		L101	B-7	L918	J-3		*Q352	C-1	*Q750	K-6	RV705	N-5	
FL202	B-1		L121	A-7	L919	J-3		*Q420	E-7	*Q751	K-7	RV706	R-4	
FL501	F-2		L122	A-6	L920	J-1		*Q423	E-6	*Q752	K-5	RV707	R-4	
FL701	L-4		L123	A-7	L921	J-1		*Q424	E-6	*Q753	K-3	RV708	P-4	
IC1	H-1		L124 L125	A-6 A-6	*Q20	P-1		*Q425 *Q426	F-6	*Q754 *Q755	K-3	RV709	P-5	
IC2	H-1		L123	C-5	*Q120	A-7		*Q426	F-5 F-5	*Q755 *Q756	K-3 K-2	RV712 RV713	L-3 J-4	
IC3	G-1		L182	C-5	*Q121	A-7		*Q466	F-5	*Q757	K-2	RV713	J-4 J-4	
IC4	G-1		L183	D-5	*Q122	A-6		. *Q467	F-5	*Q758	K-3	RV715	K-4	
IC5	E-4		L184	D-7	*Q123	A-7		*Q468	F-5	*Q759	K-3	RV716	)_4	
IC6	G-2		L211	B-6	*Q124	A-6		*Q501	G-7	*Q760	K-3	<b>RV718</b>	M-2	
IC10	F-7		L212	C-5	*Q125	A-6		*Q513	G-5	*Q761	K-2	RV719	K-5	
IC11	G-7		L213	C-5	*Q126	A-6		*Q514	H-5	*Q762	K-2	RV720	L-5	
IC12	H-7		L231	C-6	*Q127	A-6		*Q515	G-6	*Q763	L-1	RV721	K-2	
IC13	P-1		L232	B-6	*Q128	A-5		*Q541	G-7	*Q764	L-1	RV722	K-2	
IC14	R-1		L261	B-3	*Q151	A-5		*Q550	G-5	*Q765	L-1	RV723	K-2	
IC101	B-6		L291	B-3	*Q161	A-5		*Q552	G-5	*Q766	L-2	RV724	K-2	
IC102	D-6		L292	A-3	*Q162	A-5		*Q561	G-3	*Q767	L-2	RV725	L-1	
IC103 IC104	C-6 C-7		L293 L294	A-3	*Q163	A-5	-	*Q563	G-3	*Q768	N-1	RV726	L-1	
IC104	C-7		L294 L321	D-4 D-3	*Q164 *Q165	B-5 B-5		*Q570 *Q591	F-4 F-3	*Q770 *Q771	K-2	C101	D 1	
IC201	B-3		L322	D-3	*Q167	B-5		*Q591	F-3 E-3	*Q772	K-2 L-2	S101 S401	B-1 G-1	
IC202	B-4		L351	D-3	*Q168	B-5		*Q621	E-3	*Q773	K-2	5701	M-6	
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S702 S703

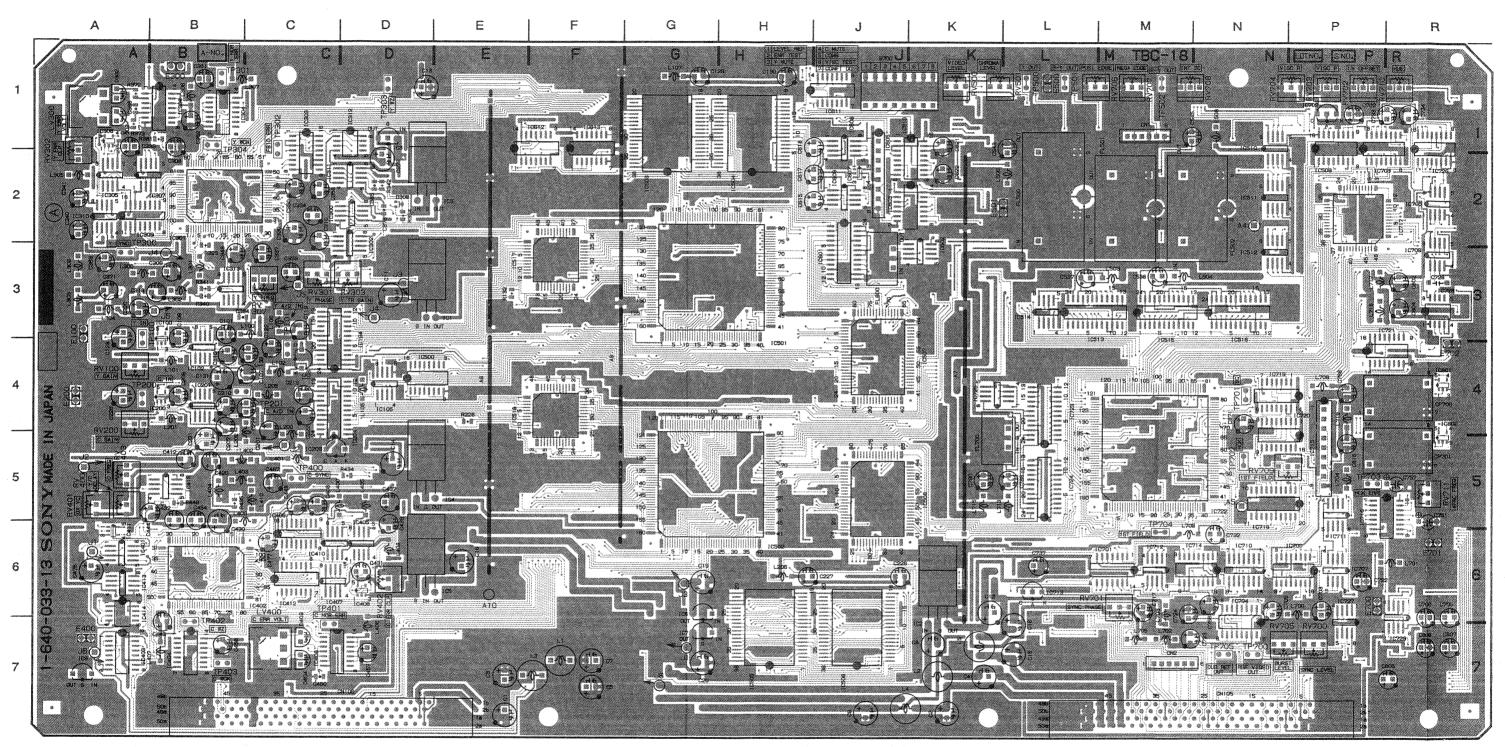
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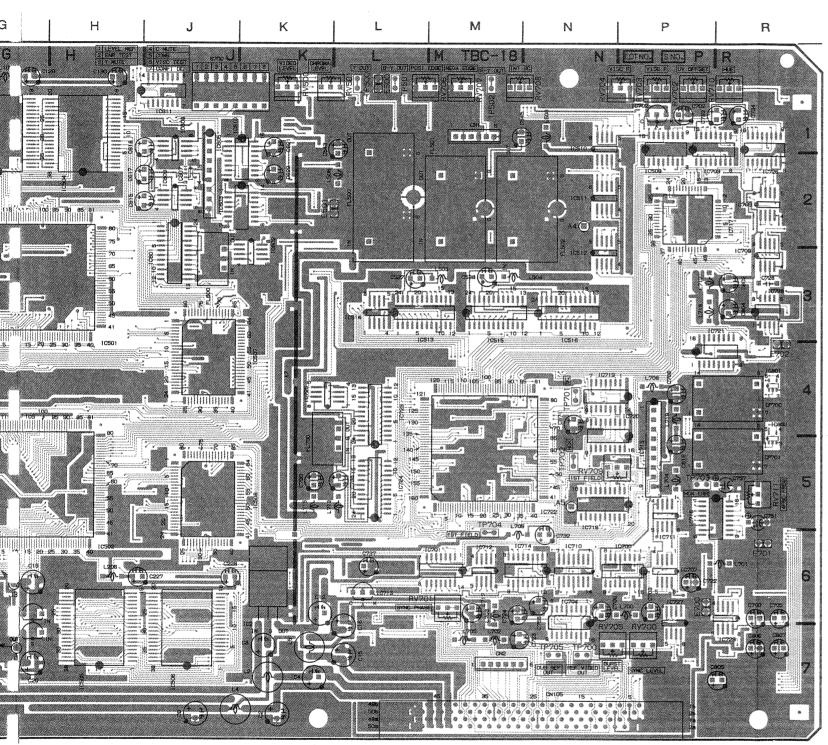
<sup>\*;</sup> B SIDE

### TBC-18P; TIME BASE CORRECTOR, CTDM (EXPAND)



TBC-18P 1-640-033-13 A SIDE

TBC-18P



TBC-18P 1-640-033-13 A SIDE

TBC-18P	(1-640-033-13)							
CN1 CN2 CN105 CN106	M-1 M-7 N-7 D-7	IC103 IC104 IC105 IC200	C-4 D-4 D-4 B-4	IC704 IC705 IC707 IC709	N-6 R-2 P-6 R-3	L508 L700 L701 L702	N-1 P-6 R-6 M-7	RV403 RV500 RV501 RV700
CP700 CP701	R-4 R-5	IC203 IC204	C-5 D-5	IC711 IC712	P-5 M-6	L704 L705	P-5 M-7	RV702 RV703
FL500 FL501 FL502 FL600 FL700	L-2 M-2 N-2 J-3 L-5	IC516 IC517 IC518 IC601 IC602 IC603	N-3 F-3 F-4 J-2 K-3 J-2	L305 L306 L307 L308 L400 L401	A-2 B-1 B-1 A-3 D-5 C-5	*Q707 *Q708 *Q709 *Q714 *Q715 *Q717	R-6 P-6 R-2 L-5 L-5 R-7	
IC1 IC2	D-3 K-7	IC605 IC607 IC608	J-1 J-2 J-1	L402 L403 L404	B-5 B-5 B-5	*Q718 *Q719	R-7 R-7	
IC3 IC4 IC5 IC6 IC7 IC8 IC9 IC100	D-2 D-5 D-6 G-6 G-7 D-1 A-7 B-4	IC609 IC610 IC611 IC612 IC613 IC700 IC701 IC702	J-2 J-1 J-1 E-2 F-2 P-6 M-6 P-1	L405 L406 L407 L408 L409 L410 L503 L504	D-5 D-7 B-7 D-6 C-5 C-5 M-3 M-3	RV100 RV200 RV301 RV302 RV303 RV307 RV400 RV401	A-4 A-4 C-3 A-2 D-3 C-3 A-5 B-3	
IC102	B-4	IC703	P-2	L506	L-2	RV402	D-6	

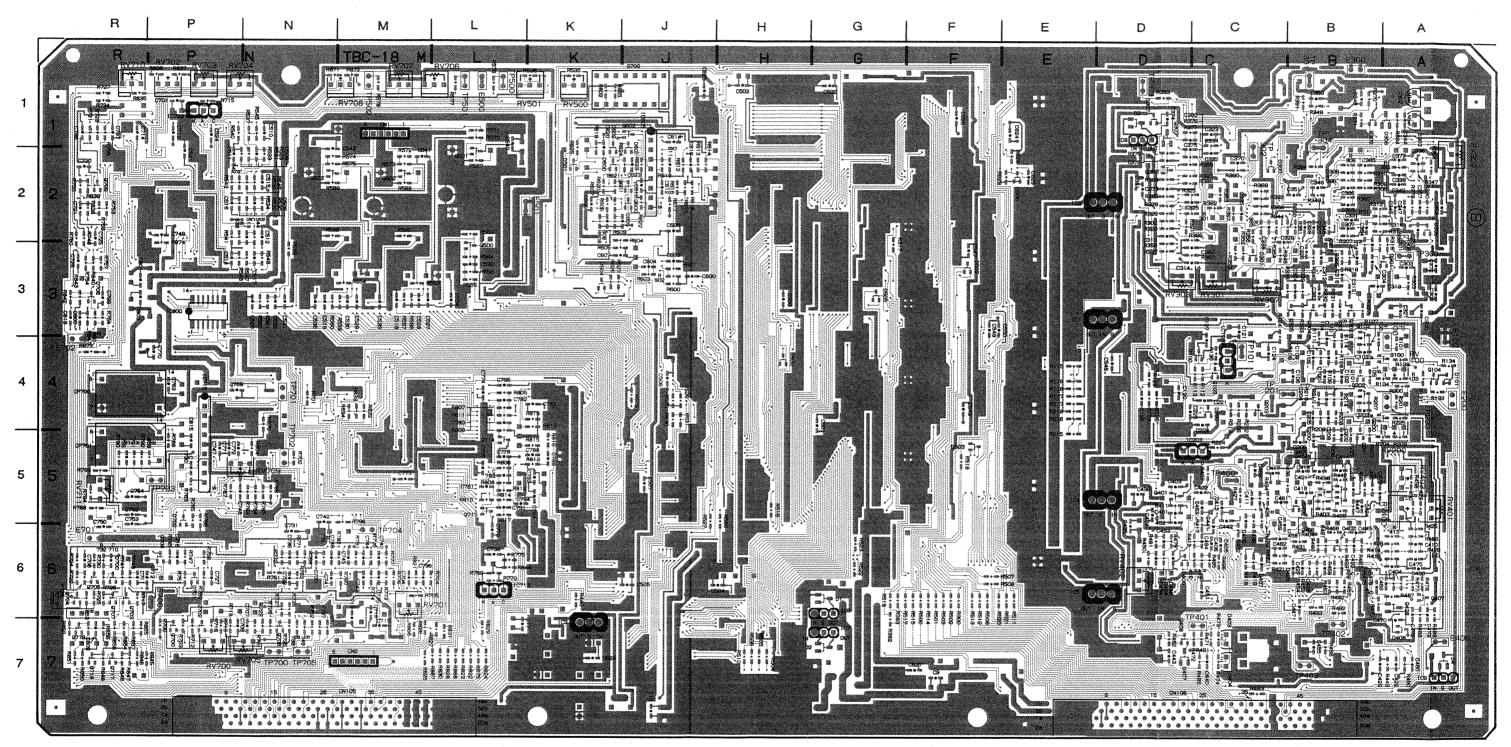
A-5 K-1 L-1 P-7 M-6 P-1 P-1 N-7 L-1 M-1 P-5 R-1 R-5

J-1

A-4 C-4 A-3 B-1 C-2 D-1 B-7 B-7 L-1 L-1 M-7 N-4 N-5 P-5 M-6 N-7

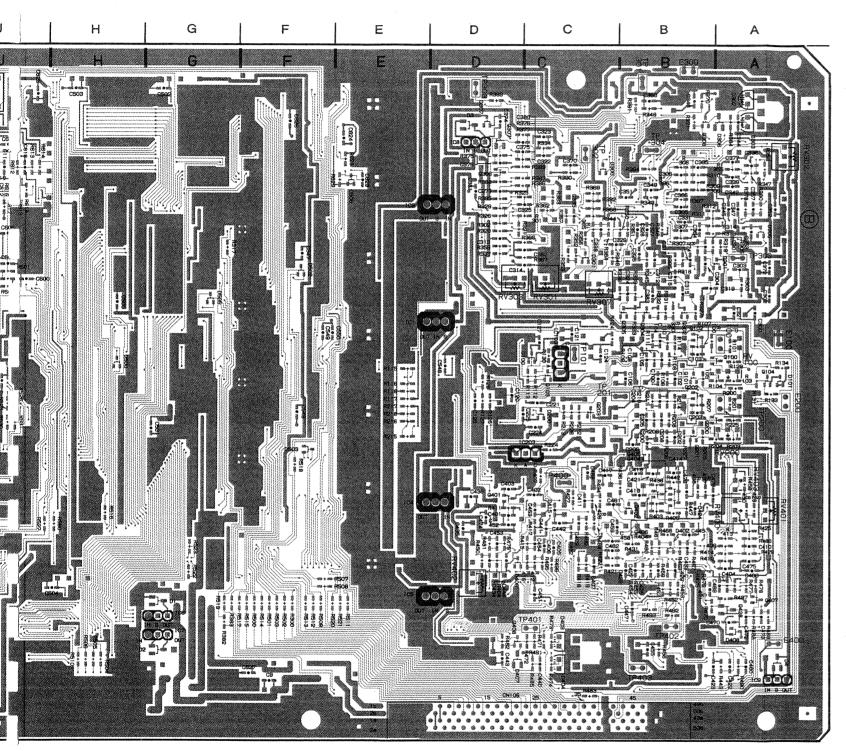
\*: B SIDE

#### TBC-18P; TIME BASE CORRECTOR, CTDM (EXPAND)



TBC-18P 1-640-033-13 B SIDE

TBC-18P



TBC-18P 1-640-033-13 B SIDE

TBC-18P	(1-640-033-13	)						
CN1 CN2 CN105 CN106  CP700 CP701  *D1 *D2 *D3 *D4 *D100 *D300 *D301 *D305 *D305 *D306 *D307 *D404 *D406 *D407 *D408 *D500 *D501 *D501 *D502 *D503 *D504 *D500 *D601 *D602 *D700 *D701 *D702 *D706 E100 E200 E300 E400 E501 E700 E701 E702 FL500 FL501 FL502 FL500 FL700 E100 E701 E702 FL500 FL501 FL502 FL500 FL700 FL501 FL502 FL500 FL501 FL502 FL500 FL700 FL501 FL502 FL500 FL502 FL500 FL5	M-17 M-17 M-17 M-17 M-17 M-17 M-17 M-17	IC103 IC104 IC105 IC200 IC201 IC203 IC204 IC300 IC301 IC302 IC303 IC304 IC305 IC306 IC307 IC308 IC309 IC311 IC312 IC313 IC401 IC402 IC403 IC404 IC405 IC406 IC407 IC408 IC409 IC410 IC411 IC412 IC413 IC414 IC415 IC500 IC501 IC502 IC503 IC504 IC505 IC506 IC507 IC508 IC509 IC510 IC511 IC512 IC513 IC514 IC515 IC516 IC517 IC518 IC601 IC601 IC601 IC601 IC602 IC603 IC605 IC607 IC608 IC607 IC608 IC601 IC601 IC611 IC612 IC613 IC701 IC702 IC703	CDDBBCDDBAAAABAADCBABABDDCCCCCACAABDGGGGHHJJJPNNNNLLLNFFJKJJJJJL1216612 CDDBBCDDBAAAABAADCBABABDDCCCCACAABDGGGGHHJJPNNNNLLLNFFJKJJJJJJL12166612	IC704 IC705 IC707 IC709 IC710 IC711 IC712 IC713 IC714 IC715 IC716 IC717 IC718 IC717 IC718 IC717 IC720 IC720 IC721 IC722 IC723 IC724 IC725 IC726 IC727 IC728 IC729 *IC800 IC801 IC802 LV300 LV400 L1 L2 L3 L4 L5 L100 L101 L102 L105 L106 L107 L200 L201 L202 L205 L206 L300 L301 L302 L303 L304 L305 L306 L307 L308 L400 L401 L402 L403 L401 L402 L403 L405 L406 L407 L408 L406 L407 L408 L409 L410 L503 L504 L506	NRPRNPMLNPPPPPPMLLLRPRRPRR AC FKFKKCBCDCGCBCCHABBAAABBACCBBBDDBDCCMMLNPPPPPPPPMLLLRPRRPRR AC FKFKKCBCDCGCBCCHABBAAABBACCBBBDDBDCCMML	L508 L700 L701 L702 L703 L704 L705 L706 L708 L717 L718 L719  *Q100 *Q101 *Q102 *Q101 *Q102 *Q104 *Q200 *Q201 *Q202 *Q301 *Q202 *Q305 *Q306 *Q307 *Q308 *Q306 *Q307 *Q308 *Q404 *Q405 *Q406 *Q407 *Q408 *Q408 *Q408 *Q408 *Q408 *Q408 *Q408 *Q408 *Q409	NPRMMPMMPLKPPP ABBCAABBCAABBBDDBDBBBBBADALLMNJJJPPRRRRNRPRLLRRR AACADCABD-16676576455334 444344454433333211155556567632221776666766255777 44432333536	RV403 RV500 RV501 RV700 RV701 RV700 RV701 RV703 RV704 RV705 RV706 RV707 RV708 RV709 RV711 S700 TP100 TP101 TP200 TP201 TP301 TP302 TP303 TP304 TP401 TP402 TP401 TP402 TP403 TP500 TP501 TP500 TP501 TP500 TP501 TP502 TP700 TP705

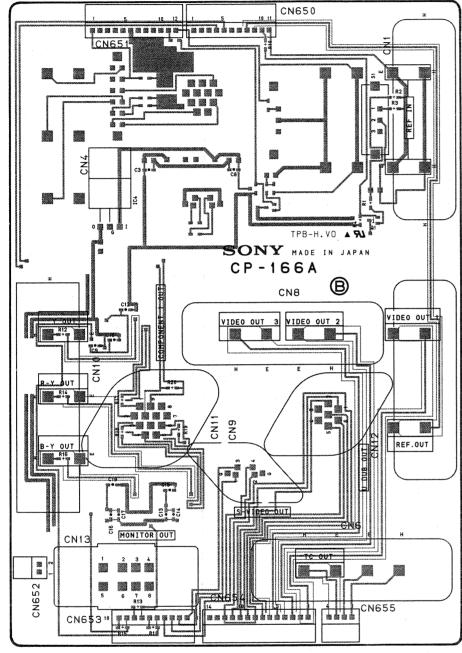
A-5 K-1 L-1 P-7 M-6 P-1 P-1 N-7 L-1 M-1 P-5 R-1 R-5

J-1

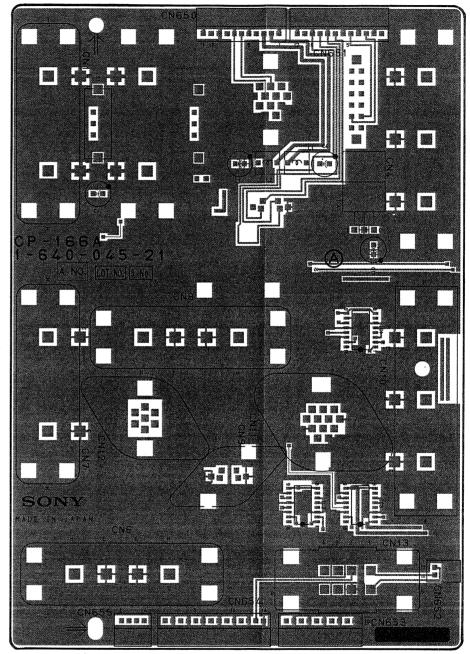
A-4 C-4 A-4 B-4 A-3 B-1 C-2 D-1 B-1 C-7 B-7 L-1 N-7 N-4 N-5 P-6 N-7

\*: B SIDE

#### CP-166A; VIDEO OUTPUT CONNECTOR, COMPONENT OUT DRIVER



CP-166A 1-640-045-21 B SIDE



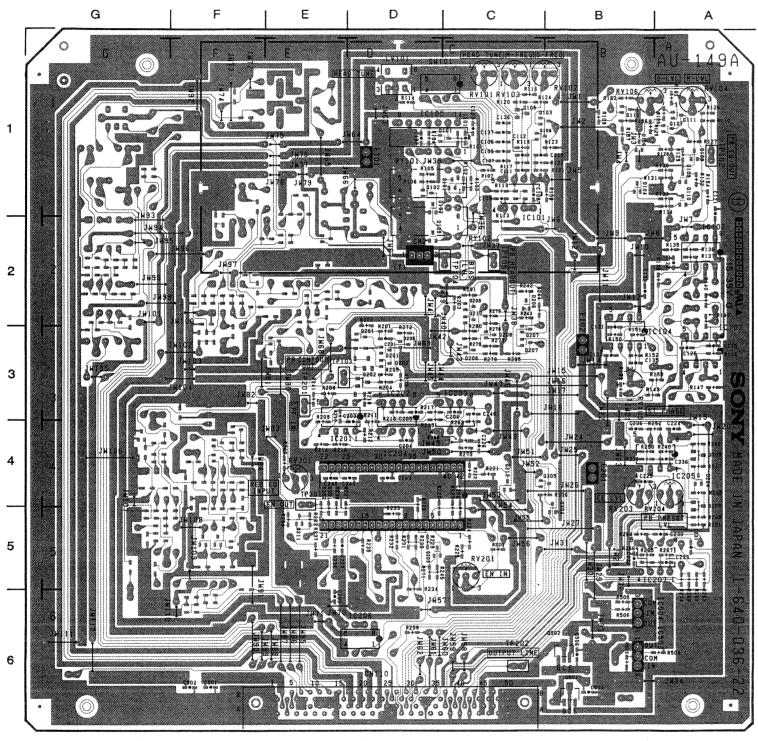
CP-166A 1-640-045-21 A SIDE

#### CP-166A(1-640-045-21)

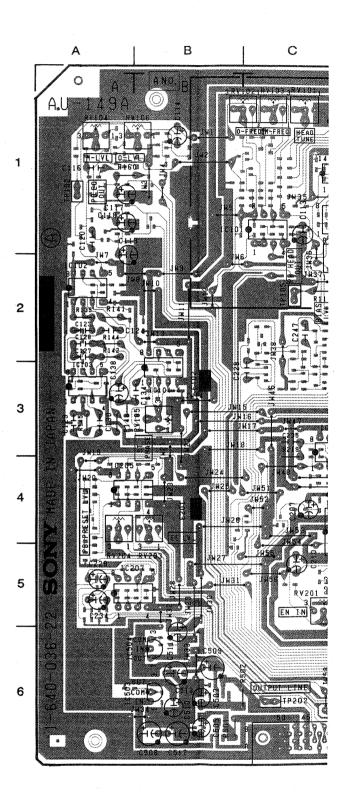
CN1 CN2 CN3 CN4 CN5 CN6 CN7 CN8 CN9 CN10 CN11 CN12 CN13 CN650 CN651 CN651 CN653 CN654 CN655	A-1 B-2 C-2 D-1 D-1 A-6 A-4 B-3 B-5 D-4 B-4 C-6 B-1 C-6 B-6 A-6
IC1	D-3
IC2	C-5
IC3	D-5
IC4	D-2
L1	C-2
L2	C-2
*Q1	A-3
*Q2	B-2
51	B-1
52	B-2
53	D-2

<sup>\*:</sup> B SIDE

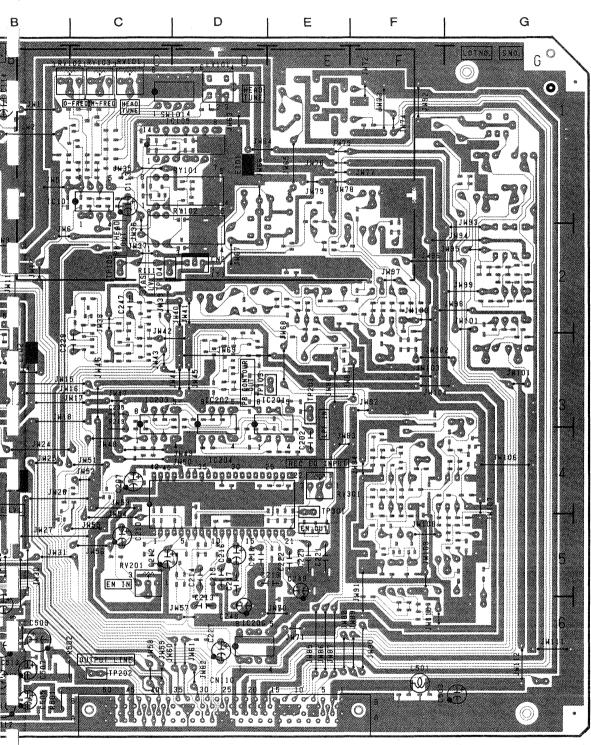
#### U-149AP; AUDIO CH-2 PB PROCESS, DOLBY SYSTEM



AU-149AP 1-640-036-22 B SIDE



**AU-149AP** 



AU-149AP 1-640-036-22 A SIDE

AU-149AP(1-640-036-22) TP102 TP103 TP104 TP105 TP201 TP202 TP301 CN2 CN110 A-1 E-3 C-2 C-2 E-3 C-6 E-4 \*D101 \*D102 \*D104 \*D105 \*D201 \*D202 \*D204 \*D206 \*D207 \*D208 \*D209 C-1 D-1 B-1 D-2 D-3 D-3 A-4 C-2 C-3 C-3 E101 E102 E201 D-1 B-3 B-4 C-1 A-2 A-3 B-3 D-1 E-3 D-3 C-3 D-4 A-4 D-6 A-5 B-6 IC101 IC102 IC103 IC104 IC105 IC201 IC202 IC203 IC204 IC205 IC206 IC207 IC503 IC504 LV101 D-1 L501 F-6 \*Q101 \*Q102 \*Q108 \*Q108 \*Q100 \*Q201 \*Q202 \*Q205 \*Q206 \*Q207 \*Q208 \*Q209 \*Q210 \*Q211 \*Q211 \*Q212 \*Q501 \*Q501 \*Q501 C-1 A-1 A-1 A-1 D-3 D-3 A-4 A-5 C-3 C-3 C-5 C-2 E-5 C-4 B-6 B-6 RV101 RV102 RV105 RV106 RV201 RV203 RV204 RV301 C-1 C-1 B-3 B-1 C-5 B-4 A-4 E-4

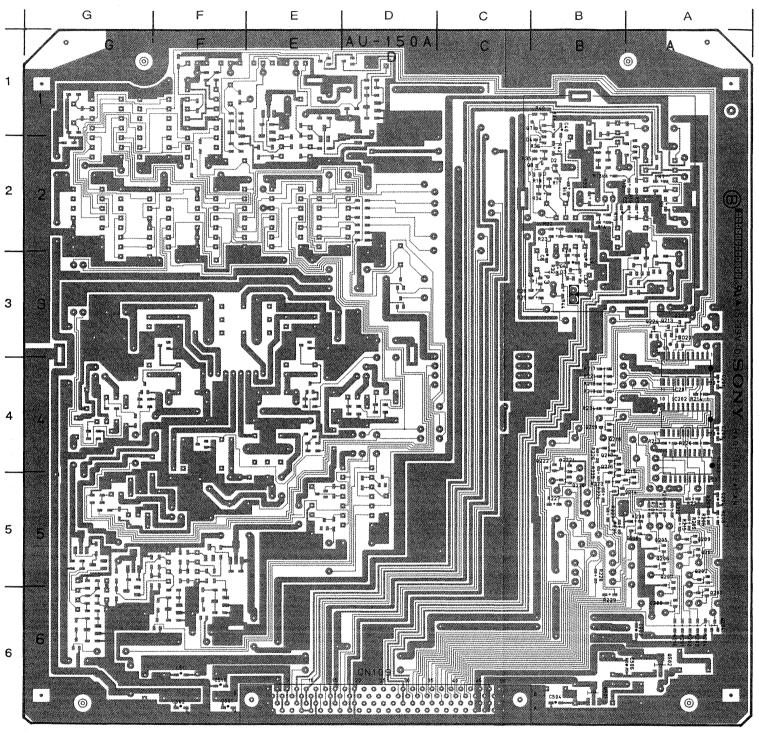
15-18

RY101 RY102

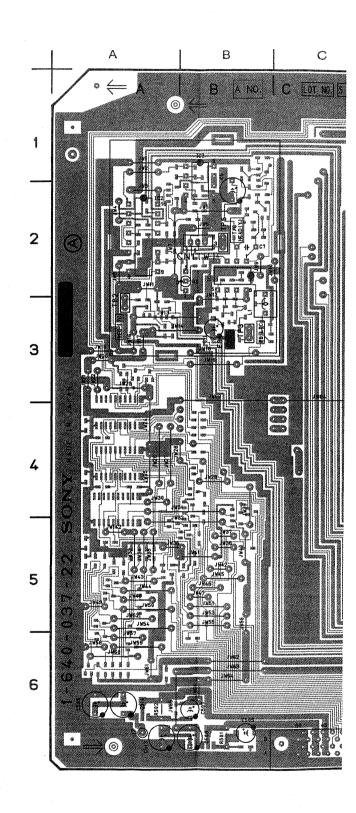
SW101 C-1 \* : B SIDE

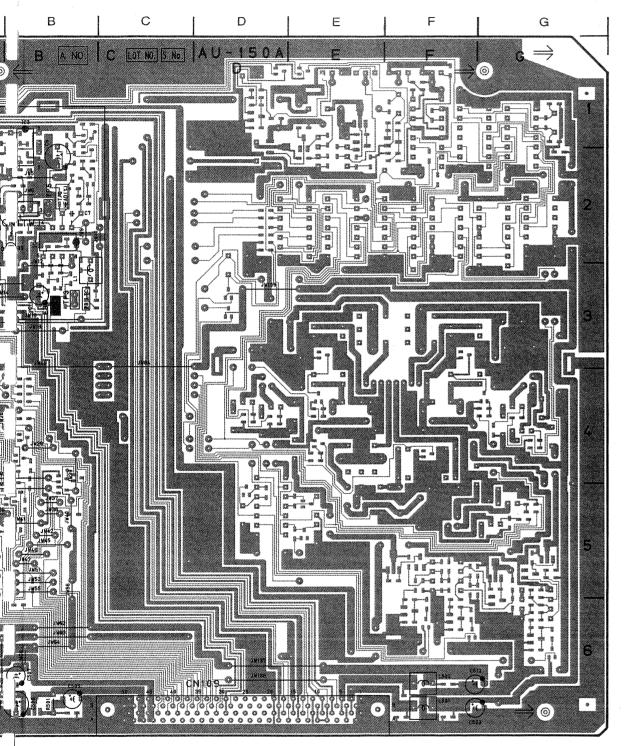
D-1 D-2

#### IL 150A; AUDIO MODE CONTROL, LTC PB



AU-150A 1-640-037-22 B SIDE



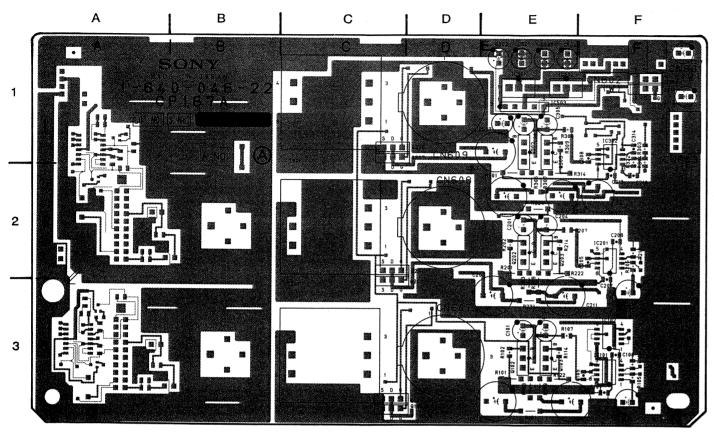


AU-150A 1-640-037-22 A SIDE

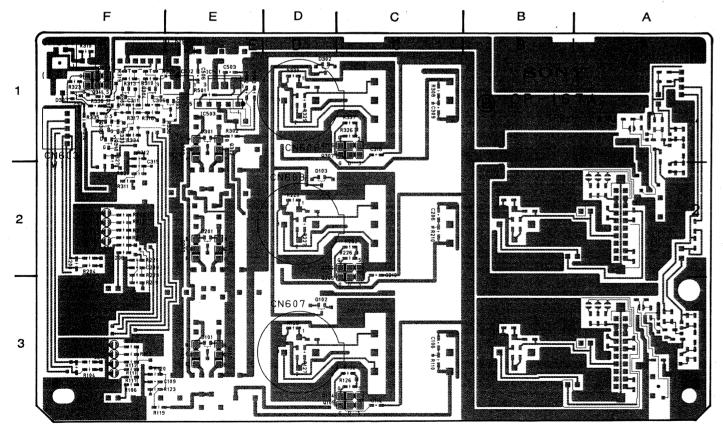
AU-150A AU-150A

# AU-150A (1-640-037-22) CN1 CN109 B-2 D-7 \*D2 \*D3 \*D4 \*D201 B-2 B-3 B-2 A-3 E3 B-3 IC2 IC3 IC4 \*IC201 \*IC202 \*IC203 A-2 B-1 B-2 A-5 A-5 A-5 B-3 F-7 F-7 L1 L501 L502 Q3 \*Q4 \*Q7 \*Q8 \*Q201 \*Q202 \*Q203 \*Q204 \*Q205 \*Q206 \*Q207 \*Q210 \*Q213 \*Q214 \*Q215 \*Q218 \*Q212 \*Q222 \*Q222 \*Q223 \*Q223 \*Q2501 \*Q501 \*Q501 TP2 TP3 TP5 A-3 B-3 B-2 \*: B SIDE

#### CP-167A; AUDIO OUTPUT CONNECTOR, LINE OUT DRIVER



CP-167A 1-640-046-22 A SIDE



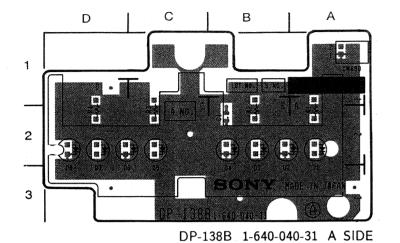
CP-167A 1-640-046-22 B SIDE

CP-167A(1-640-046-22)

CP-167A(	1-640-04
CN601 CN602 CN603 CN607 CN608 CN609	F-1 F-1 F-3 D-2 D-1
*D101 *D102 *D103 *D201 *D301 *D302 *D303 *D304 *D305	E-3 D-3 D-2 E-2 E-1 D-1 F-1 F-1 E-1
IC101 IC102 IC201 IC302 IC501 IC502 IC503	F-3 F-3 F-2 F-1 E-1 E-1
Q102 Q103 Q104 Q105 Q202 Q203 Q204 Q205 Q302 Q303 *Q304 *Q305 Q306 Q307 Q308 *Q309 *Q310 Q311	E-3 D-3 D-3 D-3 E-2 D-2 E-1 F-1 D-1 F-1 F-1 F-1 F-1
T101 T201 T301	C-3 C-2 C-1

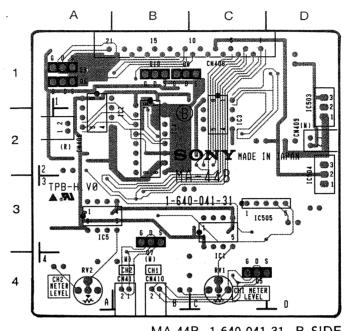
\*: B SIDE

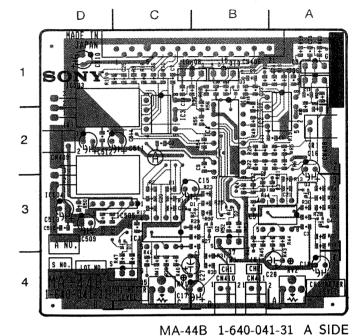
DP-138B; AUDIO LEVEL METER BACK LIGHT
MA-44B; AUDIO METER DRIVER, HEADPHONE AMPLIFIER
VR-116B; AUDIO PB LEVEL CONTROL, HEADPHONE VOLUME CONTROL



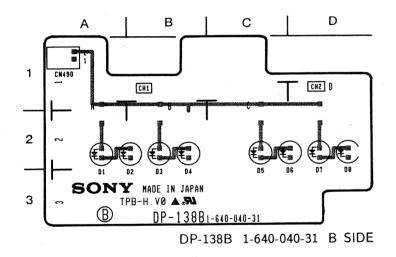
DP-138B(1-640-040-31)

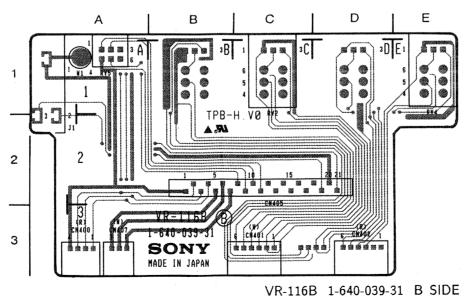
CN490	A-1
D1 D2 D3 D4 D5 D6 D7 D8	A-2 B-2 B-2 B-2 C-2 D-2 D-2
*; B S	IDE

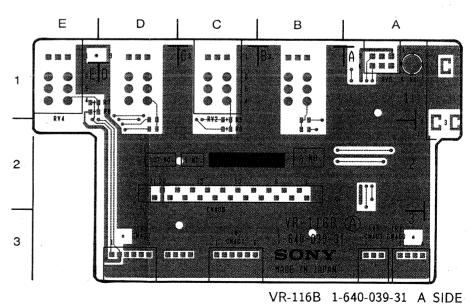




MA-44B 1-640-041-31 B SIDE







15-24

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MA-44B(1-540-041-31)
   CN406 B-1
CN408 A-2
CN409 D-2
CN410 B-4
   CN410
CN411
                         B-4
  D1
D2
D3
                         C-3
B-3
B-1
  IC1
IC2
IC3
IC4
IC5
IC503
IC504
IC505
                         C-3
B-2
C-2
B-2
B-3
                         D-1
D-2
C-3
  Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
                         B-3
B-3
A-3
C-4
A-1
B-3
B-1
A-1
B-1
  RV1
RV2
                        C-4
A-4
 *; B SIDE
```

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R-116B(1-640-039-31)
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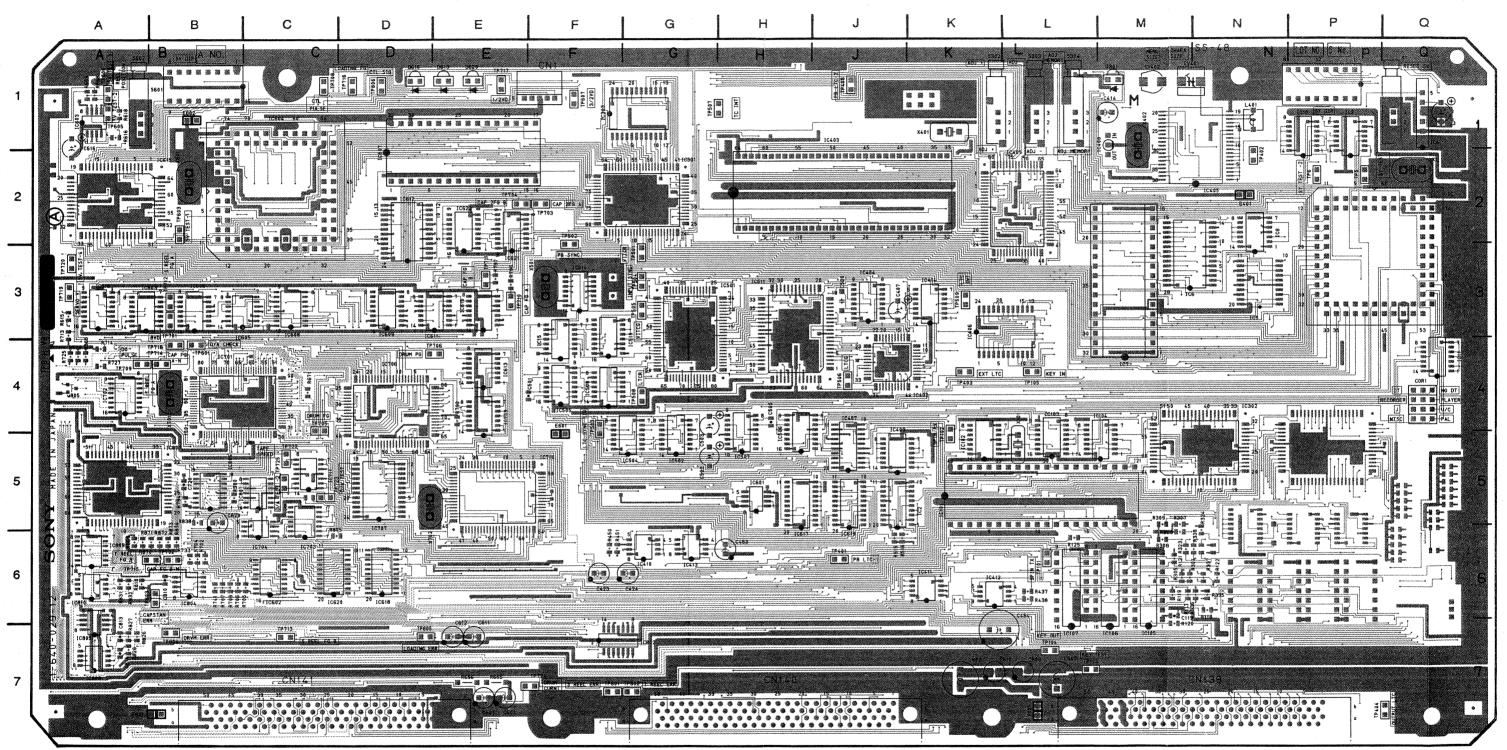
CN400 A-1 CN401 C-3 CN402 D-3 CN405 C-2 CN407 A-2 J1 A-1

RV2 C-2 E-2 A-1 RV4

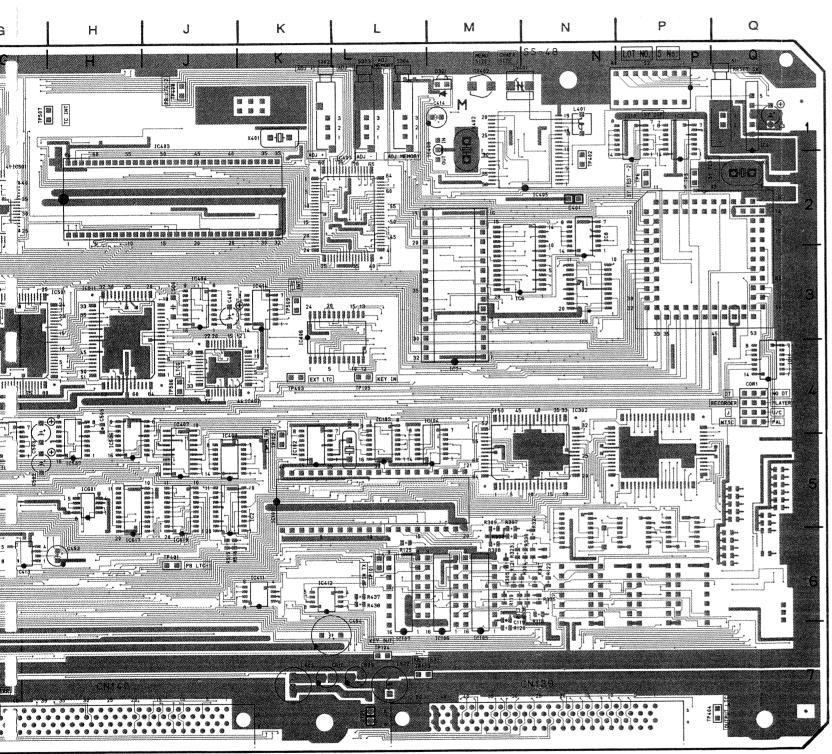
RV5

\*; B SIDE

# 5-48P; SYSTEM CONTROL, SERVO SYSTEM MAIN, TIME CODE READER, CHARACTER GENERATOR



SS-48P 1-640-029-12 A SIDE



SS-48P 1-640-029-12 A SIDE

SS-48P (1-640-029-12)

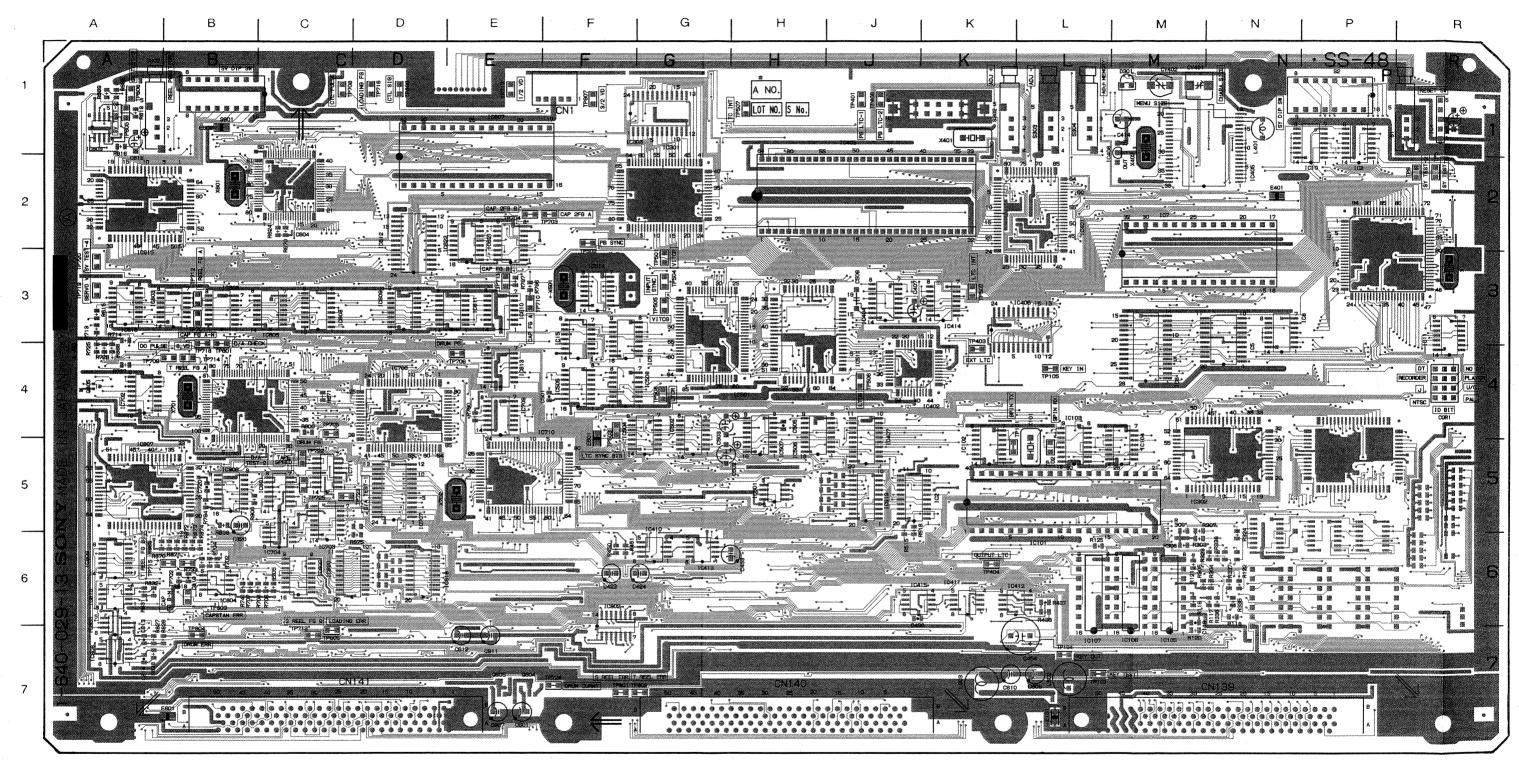
SS-48P	(1-640-029	-12)				
CN1	F-1	IC401	L-2	*Q404	J-7	TP704
CN139		IC402		*Q405	J-6	TP705
CN140		IC403		*Q406	M-1	TP706
CN141	C-7	IC404	J-3	*Q407	M-1	TP708 TP709
COR1	Q-4	IC405 IC406 IC407		*Q408 *Q409 *Q410	M-1 M-1 N-2	TP710 TP711
CV401	M-1	IC408		*Q411	K-6	TP712
CV402		IC409 IC410		*Q412 *Q601	G-5 C-1	TP713 TP714
*D101	F-3	IC411		*Q602	C-1	TP715
*D102	F-4	IC412		*Q603	C-1	TP716
D301	M-1	IC413 IC414		*Q604 *Q605	E-7 E-7	TP717 TP718
*D401 *D402	F-5 G-5	IC501		*Q606	J-7	TP719
*D402	G-5	IC501	_	*Q701	C-4	TP720
*D404	F-6	IC504		*Q702	B-4	TP722
*D405	F-6	IC505		*Q703	F-6	TP723
*D406	K-4	IC506		*Q704	E-6	TP724
*D601	C-6	IC507		*Q705 *Q706	E-6 E-6	TP725 TP801
*D602 *D603	C-6 C-6	IC508 IC510		*Q707	E-6	TP802
*D604	H-5	IC510		*Q708	C-4	TP803
*D605	C-6	IC514		*Q709	C-4	TP804
*D606	C-6	IC601	H-5	*Q710	B-4	TP805
*D607	C-6	IC602		*Q711	B-4	TP806
*D608	A-3	IC603		*Q801	A-5	X1
*D609	A-3 A-1	IC604 IC605		*Q802 *Q803	A-2 A-2	X101
*D610 *D611	C-2	IC605		Q805	A-4	X401
*D612	C-2	IC607		4000	, · ·	X501
*D613	C-2	IC608		- S1	Q-1	X601
*D614	C-2	IC609		<b>S2</b>	P-1	X701
*D615	B-2	IC610		S302	K-1	X702
*D616	E-2 D-1	IC611		\$303 \$304	L-1 L-1	
D618 D619	E-1	IC612 IC613		S601	B-1	
D620	Ē-Î	IC615		S602	A-1	
*D701	C-5	IC616				
*D702	D-6	IC617		TP5	P-2	
*D703	E-6	IC618		TP6 TP101	P-2 L-6	
*D801	A-6	IC619 IC620		TP101	K-5	
E101	L-7	IC621		TP103	L-7	
E401	N-2	IC622		TP104	L-7	
E601	F-4	IC701		TP105	L-4	
E602	B-1	IC702		TP401	J-6	
E801	A-7	IC703 IC704		TP402 TP403	N-2 K-4	
IC1	Q-2	IC706		TP404	Q-7	
IC2	Ř-5	IC707		TP408	J-1	
IC3	P-1	IC709		TP501	G-3	
IC4	Q-1	IC710		TP502	F-2	
IC5	N-3 M-3	IC711 IC801		TP503 TP504	F-4 G-3	
IC6 IC7	M-4	IC802		TP505	G-3	
IC8	N-2	IC803		TP506	J-4	
IC10	P-1	IC804		TP507	G-1	
IC11	Q-4	IC805		TP508	G-4	
IC15	F-4	IC806		TP509	K-3	
IC101	K-5 K-5	IC807 IC808		TP601 *TP602	B-4 B-2	
IC102 IC103	N-5 L-4	IC809		TP603	B-2	
IC103	L-4	IC810		*TP604	B-1	
IC105	M-7	L401	N-1	TP605	A-1	
IC106		L602	L-7	TP606	A-1	
IC107		L603	K-7	TP607	F-1	
IC301	G-2 N-4	*Q401	K-7	TP701 TP702	B-3 B-6	
IC302 IC303		*Q401		TP702	F-2	
1000	1-1	Q 102	. 11-1	, , , , ,		

E-2 C-4 D-1 A-4 E-3 E-3 B-7 B-4 A-6 D-1 E-1 B-4 A-3 A-5 F-7 C-5 F-7 C-7 A-6 B-7 D-1

Q-2 L-4 K-1 F-3 B-2 B-4 D-6

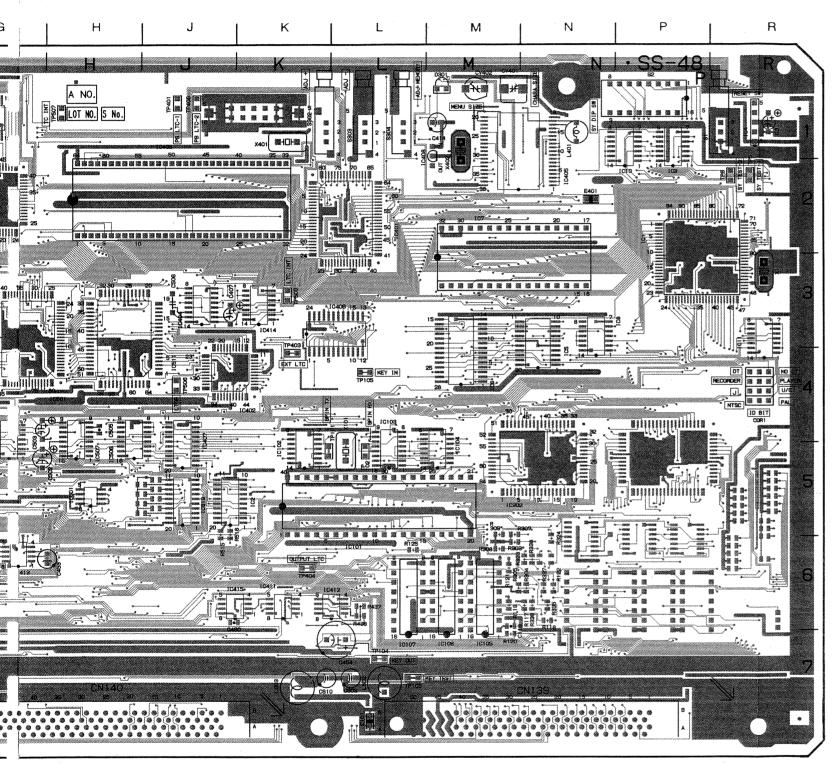
\*: B SIDE

# SS-48P; SYSTEM CONTROL, SERVO SYSTEM MAIN, TIME CODE READER, CHARACTER GENERATOR



SS-48P 1-640-029-13 A SIDE

SS-48P



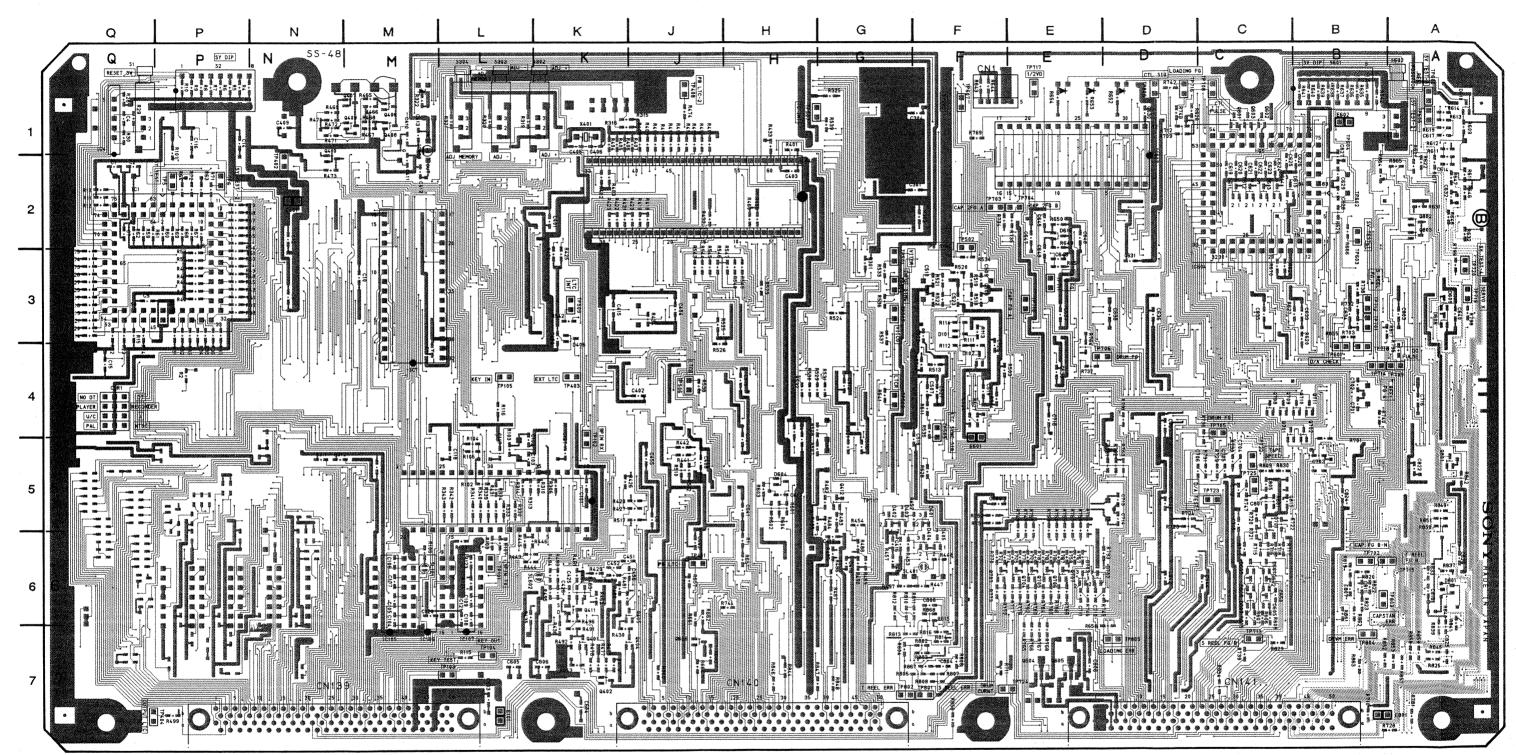
SS-48P 1-640-029-13 A SIDE

SS-48P (	(1-640-029-13)						
CN1 CN139 CN140 CN141	F-1 N-7 H-7 C-7	IC107 IC301 IC302 IC303	L-6 G-2 N-5 G-1	L401 L602 L603	N-1 L-7 K-7	TP702 TP703 TP704 TP705	B-6 F-2 E-2 C-4
COP1 COP2 COP3 COP4	R-4 R-4 R-4 R-4	IC401 IC402 IC403 IC404 IC405	L-2 J-4 J-2 J-3 M-1	*Q401 *Q402 *Q403 *Q404 *Q405	K-7 K-4 J-6 K-7 K-6	TP706 TP708 TP709 TP710 TP711	E-4 C-1 B-4 E-3 E-3
COR1 CV401 CV402	R-4 M-1 M-1	IC406 IC407 IC408 IC410 IC411	L-3 J-5 M-1 G-6 K-6	*Q406 *Q407 *Q408 *Q409 *Q410	M-1 M-1 M-1 M-1 N-1	TP712 TP713 TP714 TP715	B-3 C-7 B-4 B-6
*D101 *D102 D301	F-3 F-4 M-1	IC412 IC413 IC414 IC415	K-6 G-6 K-3 J-6	*Q411 *Q412 Q604 Q605	K-6 G-5 E-7 E-7	TP716 TP717 TP718 TP719 TP720	D-1 E-1 B-4 A-3 A-3
*D401 *D402 *D403 *D404 *D405	F-5 G-5 G-5 F-6 F-6	IC501 IC502 IC504 IC505 IC506	G-3 G-4 G-4 F-4 H-4	*Q606 *Q701 *Q702 *Q703 *Q704	J-7 D-7 D-7 F-6 F-6	TP722 TP723 TP724 TP725 TP801	C-5 C-5 F-7 C-5 F-7
*D406 *D601 *D602 *D603 *D604	K-3 C-6 C-6 C-6 H-5	IC507 IC508 IC510 IC511 IC514	H-4 F-4 F-3 H-3 F-3	*Q705 *Q706 *Q707 *Q708 *Q709	E-6 E-6 E-6 L-7 M-7	TP802 TP803 TP804 TP805 TP806	G-7 B-6 B-7 C-7 D-1
*D605 *D606 *D607 *D608 *D609	C-6 C-6 C-6 A-3 A-3	IC601 IC602 IC603 IC604 IC605	H-5 C-6 A-1 C-2 B-4	*Q710 *Q711 *Q801 *Q802 *Q803	L-6 M-7 A-5 A-2 A-2	X1 X101 X401 X501	R-3 L-4 K-1 F-3
*D610 *D611 *D612 *D613	C-1 C-1 C-1 C-1	IC606 IC607 IC608 IC609	B-3 E-2 C-3 D-3	Q805 S1 S2	A-4 R-1 P-1	X601 X701 X702	B-2 B-4 E-5
*D614 *D615 *D616 *D701 *D702	C-1 C-1 E-2 C-5 E-6	IC610 IC611 IC612 IC613 IC615	E-3 E-3 D-2 E-4 A-2	\$302 \$303 \$304 \$601 \$602	K-1 L-1 L-1 B-1 A-1		
*D703 *D801 E101 E401	E-6 A-6 L-7 N-2	IC616 IC618 IC619 IC620 IC621	A-3 D-6 J-5 D-6 E-2	TP5 TP6 TP101 TP102	R-2 R-2 K-5 L-5		
E601 E602 E801	F-5 B-1 B-7	IC622 IC701 IC702 IC703	E-2 B-4 A-4 C-5	TP103 TP104 TP105 TP401	L-7 L-7 L-4 J-1		
IC1 IC2 IC3 IC4 IC5	P-3 J-5 P-1 R-1 N-3	IC704 IC706 IC707 IC709 IC710	C-6 D-4 D-5 E-4 E-5	TP403 TP404 TP408 TP501 TP502	K-4 K-6 J-1 G-3 F-2		
IC6 IC7 IC8 IC10 IC11	M-4 M-3 N-3 P-1 R-3	IC711 IC801 IC802 IC803 IC804	C-5 C-5 F-7 B-3 B-6	TP503 TP504 TP505 TP506 TP507	F-4 G-3 G-3 J-4 H-1		
IC15 IC101 IC102 IC103	F-3 L-5 K-5 L-5	IC805 IC806 IC807 IC808	A-7 B-5 A-5 A-7	TP508 TP509 TP601 TP605	G-4 K-3 B-4 A-1		
IC104 IC105 IC106	M-5 M-6 M-6	IC809 IC810	A-6 A-6	TP606 TP607 TP701	A-1 F-1 B-3		

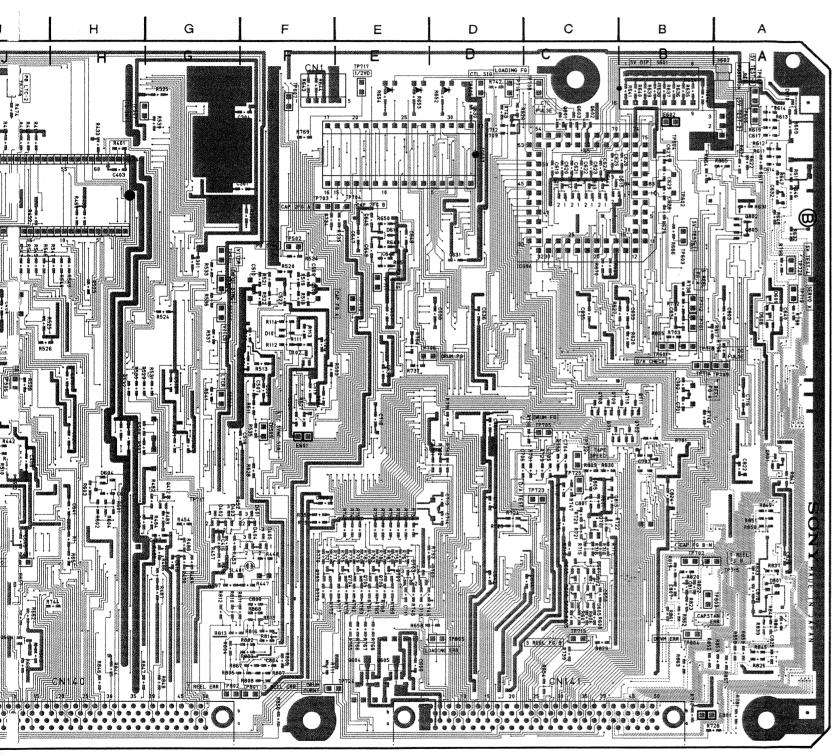
\*: B side

SS-48P

# SS-48P; SYSTEM CONTROL, SERVO SYSTEM MAIN, TIME CODE READER, CHARACTER GENERATOR



SS-48P 1-640-029-12 B SIDE



SS-48P 1-640-029-12 B SIDE

SS-48P (1	1-640-029-12)					
CN1	F-1	IC401	L-2	*Q404	J-7	TP704
CN139	N-7	IC402	K-4	*Q405	J-6	TP705
CN140	H-7	IC403	J-2	*Q406	M-1	TP706
CN141	C-7	IC404 IC405	J-3 N-2	*Q407 *Q408	M-1 M-1	TP708 TP709
COR1	Q-4	IC406 IC407	K-3 J-4	*Q409 *Q410	M-1 N-2	TP710 TP711
CV401 CV402	M-1 M-1	IC408 IC409 IC410	M-2 J-5 G-6	*Q411 *Q412 *Q601	K-6 G-5 C-1	TP712 TP713 TP714
*D101 *D102	F-3 F-4 M-1	IC411 IC412	K-6 K-6 G-6	*Q602 *Q603 *Q604	C-1 C-1 E-7	TP715 TP716 TP717
D301 *D401	F-5	IC413 IC414	K-3	*Q605	E-7	TP718
*D402	G-5	IC501	H-3	*Q606	J-7	TP719
*D403	G-5	IC502	G-5	*Q701	C-4	TP720
*D404	F-6	IC504	G-5	*Q702	B-4	TP722
*D405	F-6	IC505	F-4	*Q703	F-6	TP723
*D406	K-4	IC506	H-5	*Q704	E-6	TP724
*D601	C-6	IC507	H-5	*Q705	E-6	TP725
*D602	C-6	IC508	F-4	*Q706	E-6	TP801
*D603	C-6	IC510	G-4	*Q707	E-6	TP802
*D604	H-5	IC511	H-3	*Q708	C-4	TP803
*D605	C-6	IC514	F-3	*Q709	C-4	TP804
*D606	C-6	IC601	H-5	*Q710	B-4	TP805
*D607	C-6	IC602	C-6	*Q711	B-4	TP806
*D608	A-3	IC603	A-1	*Q801	A-5	
*D609	A-3	IC604	C-1	*Q802	A-2	X1
*D610	A-1	IC605	B-3	*Q803	A-2	X101
*D611 *D612	C-2 C-2	IC606 IC607	B-3 D-2	Q805	A-4	X401 X501
*D613	C-2	IC608	C-3	S1	Q-1	X601
*D614	C-2	IC609	D-3	S2	P-1	X701
*D615	B-2	IC610	E-3	S302	K-1	X702
*D616	E-2	IC611	D-3	S303	L-1	
D618	D-1	IC612	D-2	S304	L-1	
D619	E-1	IC613	E-4	S601	B-1	
D620	E-1	IC615	B-2	S602	A-1	
*D701 *D702	C-5 D-6	IC616 IC617	A-3 H-5	TP5	P-2	
*D703 *D801	E-6	IC618	D-6 J-5	TP6 TP101	P-2 L-6	
	A-6	IC619 IC620	C-6	TP102	K-5	
E101	L-7	IC621	E-3	TP103	L-7	
E401	N-2	IC622	E-2	TP104	L-7	
E601	F-4	IC701	B-4	TP105	L-4	
E602	B-1	IC702	A-4	TP401	J-6	
E801	A-7	IC703 IC704	C-6 C-6	TP402 TP403	N-2 K-4	
IC1	Q-2	IC706	D-4	TP404	Q-7	
IC2	K-5	IC707	D-5	TP408	J-1	
IC3	P-1	IC709	E-4	TP501	G-3	
IC4	Q-1	IC710	F-5	TP502	F-2	
IC5	N-3	IC711	C-5	TP503	F-4	
IC6	M-3	IC801	B-5	TP504	G-3	
IC7	M-4	IC802	G-7	TP505	G-3	
IC8	N-2	IC803	A-3	TP506	J-4	
IC10	P-1	IC804	B-6	TP507	G-1	
IC11	Q-4	IC805	A-7	TP508	G-4	
IC15	F-4	IC806	B-5	TP509	K-3	
IC101	K-5	IC807	B-5	TP601	B-4	
IC102	K-5	IC808	A-7	*TP602	B-2	
IC103	L-4	IC809	A-6	TP603	B-2	
IC104	L-4	IC810	A-6	*TP604	B-1	
IC105	M-7	L401	N-1	TP605	A-1	
IC106	M-7	L602	L-7	TP606	A-1	
IC107	L-7	L603	K-7	TP607	F-1	
IC301 IC302	G-2 N-4	*Q401	K-7	TP701 TP702	B-3 B-6	
IC303	F-1	*Q402	K-7	TP703	F-2	

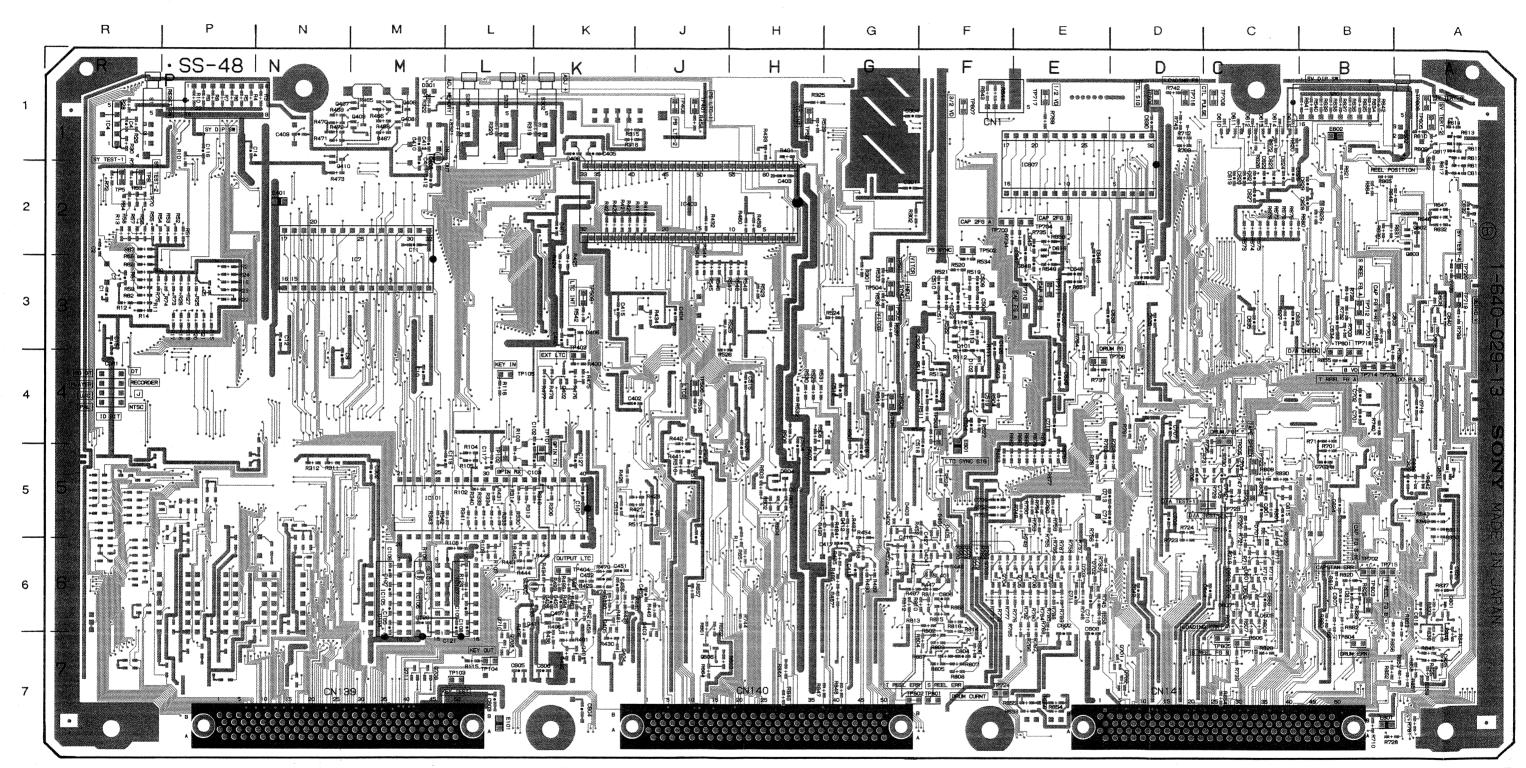
E-2 C-4 D-4 C-1 E-3 B-3 C-7 B-6 D-1 E-1 B-4 A-3 C-5 F-7 G-6 B-7 D-1

Q-2 L-4 K-1 F-3 B-2 B-4 D-6

\*: B SIDE

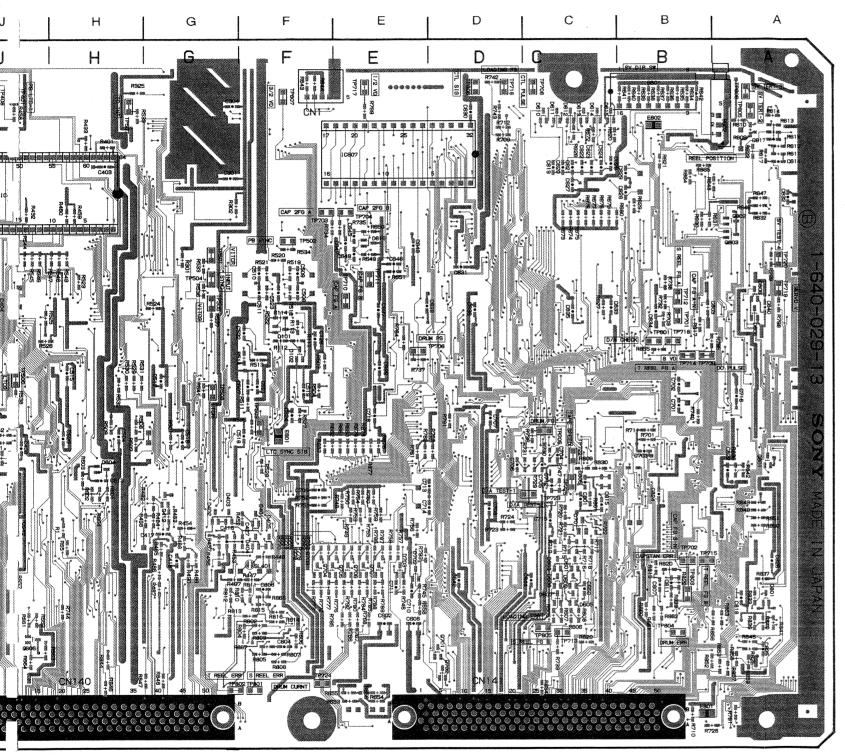
SS-48P

SS-48P; SYSTEM CONTROL, SERVO SYSTEM MAIN, TIME CODE READER, CHARACTER GENERATOR



SS-48P 1-640-029-13 B SIDE

SS-48P



SS-48P 1-640-029-13 B SIDE

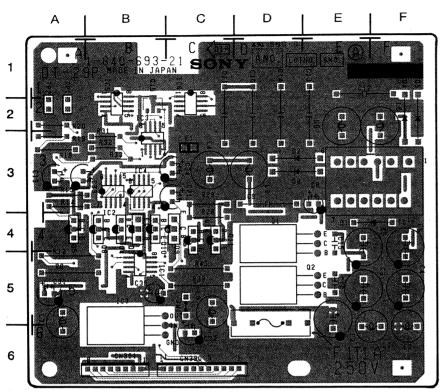
SS-48P (1-640-029-13) TP702 TP703 TP704 TP705 CN1 CN139 CN140 IC107 L401 N-7 H-7 C-7 IC301
IC302
IC303
IC401
IC402
IC403
IC404
IC405
IC406
IC407
IC408
IC411
IC412
IC413
IC504
IC505
IC506
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IC701 L602 L603 \*Q401
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\*Q702
\*Q703
\*Q704
\*Q705
\*Q706
\*Q707
\*Q708
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\*Q708
\*Q709
\*Q711
\*Q802
\*Q803
Q805 **TP706** COP1 COP2 COP3 K-4 J-6 K-7 K-6 M-1 M-1 M-1 N-1 K-6 E-7 J-7 D-7 F-6 E-6 E-6 E-6 L-7 L-6 M-7 A-5 A-2 A-4 **TP708** TP709 TP710 R-4 R-4 R-4 TP710 TP711 TP712 TP713 TP714 TP715 TP716 TP717 TP718 COP4 COR1 M-1 M-1 CV401 CV402 \*D101 \*D102 D301 TP719 TP720 TP722 \*D401 \*D402 TP723 TP724 \*D403 \*D404 \*D405 TP725 TP801 TP802 TP803 \*D406 \*D601 \*D602 \*D603 \*D604 \*D605 \*D606 \*D606 \*D607 \*D608 \*D609 \*D610 \*D611 \*D611 **TP804** TP805 TP806 X1 X101 X401 X501 X601 X701 X702 S1 S2 S302 S303 S304 S601 S602 R-1 P-1 K-1 L-1 L-1 B-1 A-1 \*D612 \*D613 \*D614 \*D615 \*D616 \*D701 \*D702 \*D703 \*D801 R-2 R-5 K-5 L-5 L-7 L-7 L-4 J-1 K-4 K-6 J-1 G-2 F-4 G-3 J-4 H-1 K-3 B-4 A-1 A-1 F-1 B-3 TP5
TP6
TP101
TP102
TP103
TP104
TP105
TP401
TP403
TP404
TP501
TP502
TP503
TP504
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TP509
TP601
TP605
TP601
TP605
TP607
TP701 E101 E401 E601 E602 E801 L-7 N-2 F-5 B-1 B-7 IC1 IC2 IC3 IC4 IC5 IC6 IC7 IC8 IC10 IC11 IC15 IC101 IC102 IC103 IC104 IC105 IC106 P-3 J-5 P-1 R-1 N-3 M-4 M-3 P-1 R-3 L-5 K-5 L-5 M-6 M-6 IC801 IC802 IC802 IC803 IC804 IC805 IC806 IC807 IC808 IC809 IC810

F-2 C-4 E-4 C-4 B-3 E-3 B-3 C-7 B-4 B-1 E-1 B-4 A-3 A-3 C-5 F-7 C-7 B-6 B-7 C-7 D-1

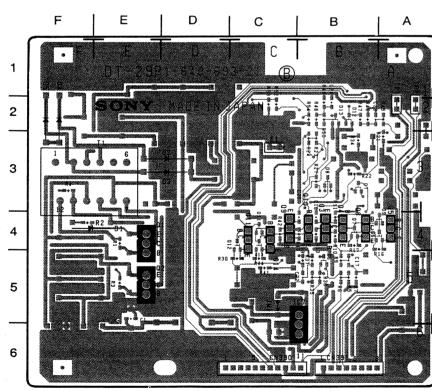
R-3 L-4 K-1 F-3 B-2 B-4 E-5

\*: B side

#### DT-29AP; DYNAMIC TRACKING



DT-29AP 1-640-693-21 A SIDE



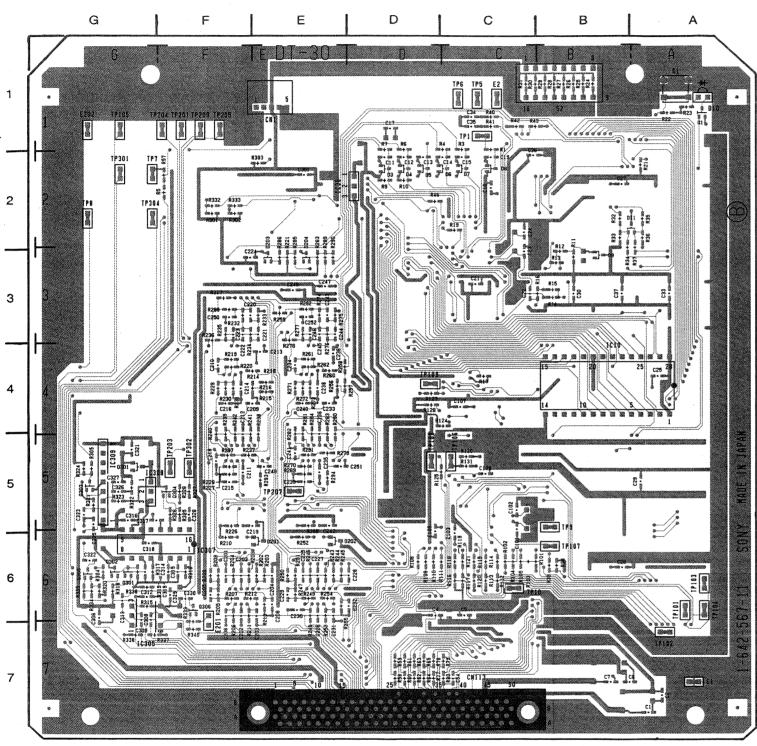
DT-29AP 1-640-693-21 B SIDE

DT-29AP	(1-640-693-21)	
CN390 CN391	C-6 B-6	
D1 D2 D3 D4 D5 *D6 *D7 *D8 *D9 *D11 *D12 *D13	F-4 D-3 D-3 F-2 F-2 B-5 B-3 A-4 C-4 B-2 B-2	
E1	C-3	
IC1 IC2	B-5 B-3	

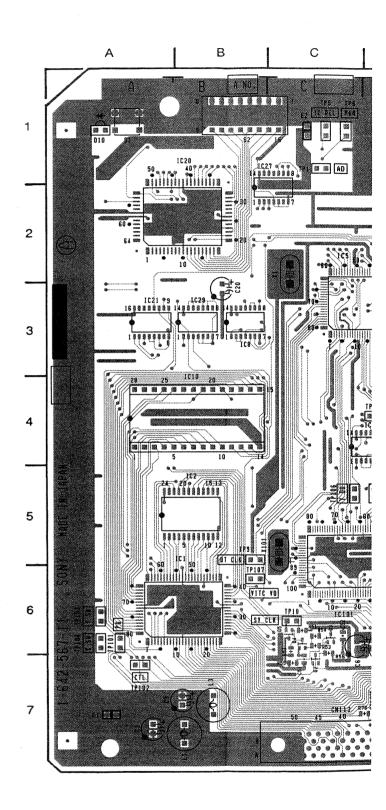
IC3 B-3 IC4 B-3 IC5 B-2 IC6 C-2 IC7 B-5 IC1 E-6 L3 D-3 L4 C-3 L5 F-2 L6 E-2 L7 A-5 L8 C-5 Q1 D-4 Q2 D-5 Q3 B-4 Q4 Q4 Q5 A-5 \*Q6 A-4 \*Q7 Q8 B-8 Q9 Q4 Q11 C-4 \*Q12 C-4 \*Q12 C-4 TP2 A-2 TP2 A-2 TP2 A-2

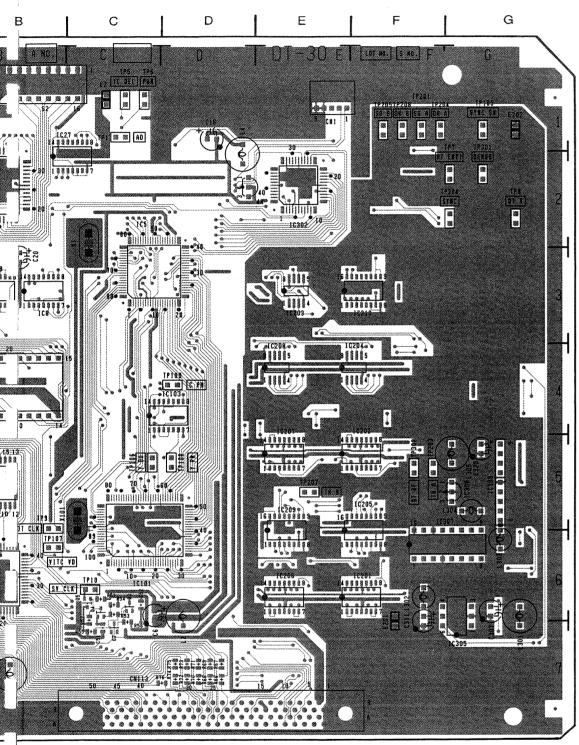
\*; B SIDE

#### 1 30; DYNAMIC TRACKING



DT-30 1-642-567-11 B SIDE





DT-30 1-642-567-11 A SIDE

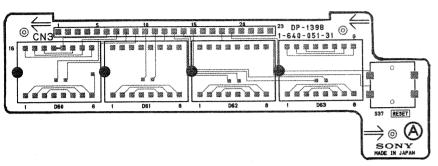
DT-30 DT-30

#### DT-30(1-642-567-11)

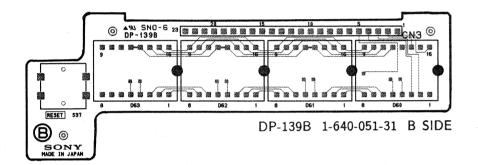
D 1-30(1-	042-301-11)		
CN1 CN113	E-1 C-7	*Q305 *Q306	G-6 F-6
*D3 *D4	D-2 D-2	S1 S2	A-1 B-1
*D5 *D6 *D7 *D8 *D9 D10 *D11 *D201 *D202 *D203 *D204 *D301	D-2 C-2 C-2 B-3 A-1 B-3 E-6 E-6 E-2 G-5	TP1 TP5 TP6 TP7 TP8 TP9 TP10 TP101 TP102 TP103 TP104 TP105	C-1 C-1 G-1 G-2 B-5 C-6 A-6 A-7 A-6 A-6 G-1
E1 E2 E201 E202	A-7 C-1 F-7 G-1	TP106 TP107 TP108 TP109 TP201	C-5 B-6 D-5 D-4 F-1
IC1 IC2 IC5 IC8 IC10 IC20 IC21 IC27 IC27	B-5 B-5 C-2 B-3 B-4 B-1 A-3 B-1 B-3	TP203 TP204 TP205 TP207 TP208 TP301 TP302 TP304	F-5 F-1 F-1 E-5 F-1 G-1 F-5 G-2
IC29 IC30 IC101 IC103 IC201 IC202 IC203 IC204 IC205 IC206 IC207 IC208 IC209 IC210 IC302 IC305 IC307 IC308 IC309	B-3 E-C-6 D-4 F-6 F-4 E-4 E-4 E-5 E-4 E-5 E-2 G-7 F-5 G-5	X1 X101	C-2 B-5
L1 L2 L3 L4 L301 L302 L303 L304 L305	B-7 D-7 B-7 D-1 G-7 F-6 G-6 G-5 G-5		
*Q1 Q2 Q3 Q4 Q5 *Q301 *Q302 *Q303	A-1 C-7 C-6 C-6 C-6 G-6 G-6 G-5		

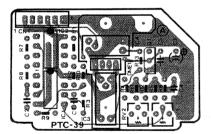
\*; B SIDE

Y- 10B; KEYBOARD Dr-139B; TIME CODE DISPLAY FC-39; SEARCH DIAL

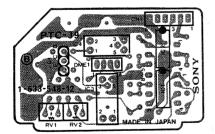


DP-139B 1-640-051-31 A SIDE

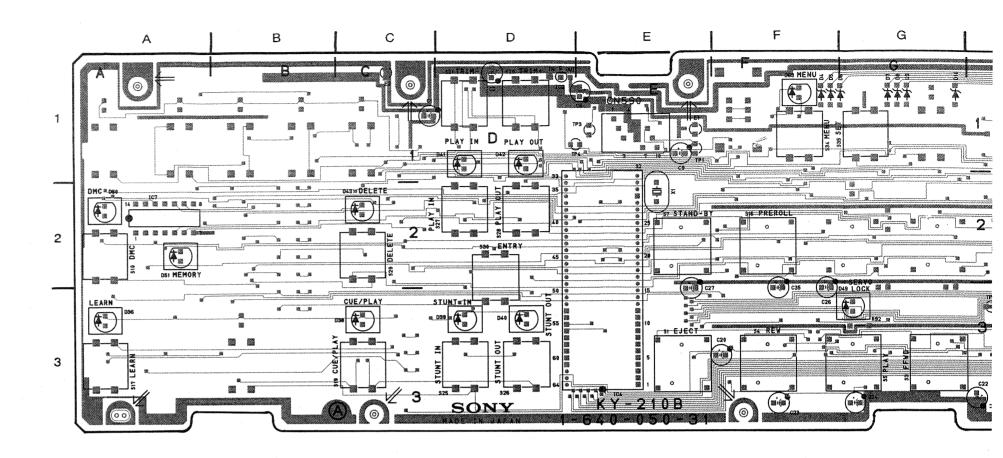


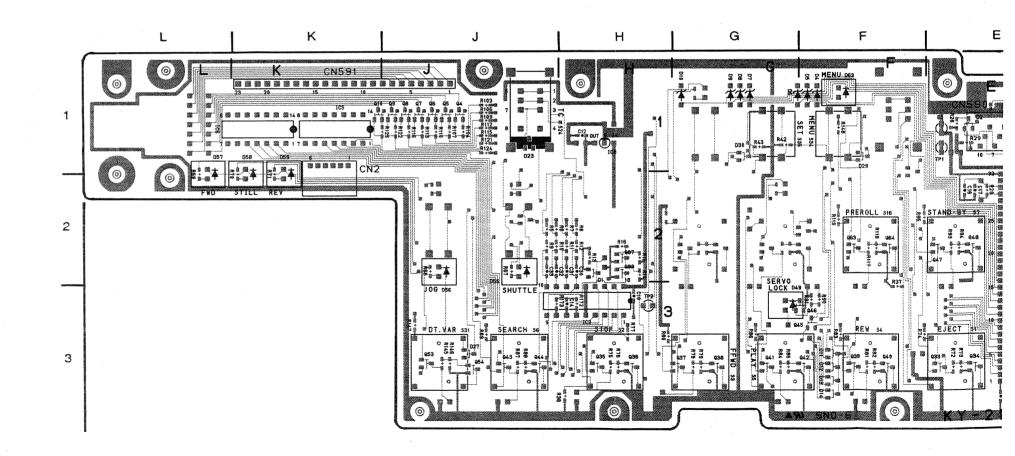


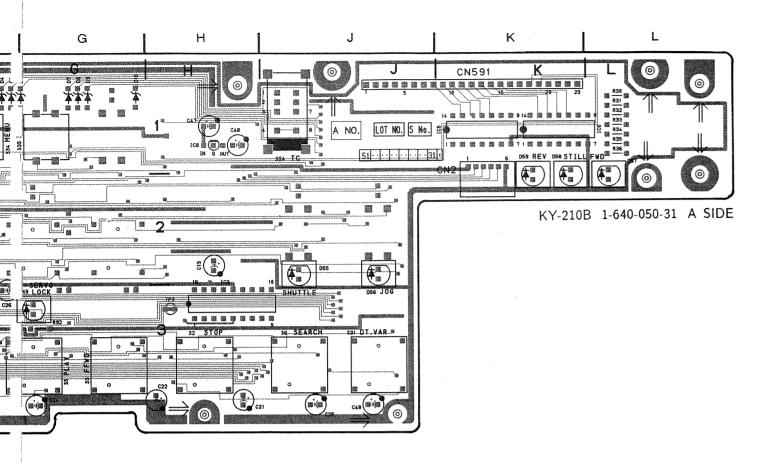
PTC-39 1-633-548-12 A SIDE

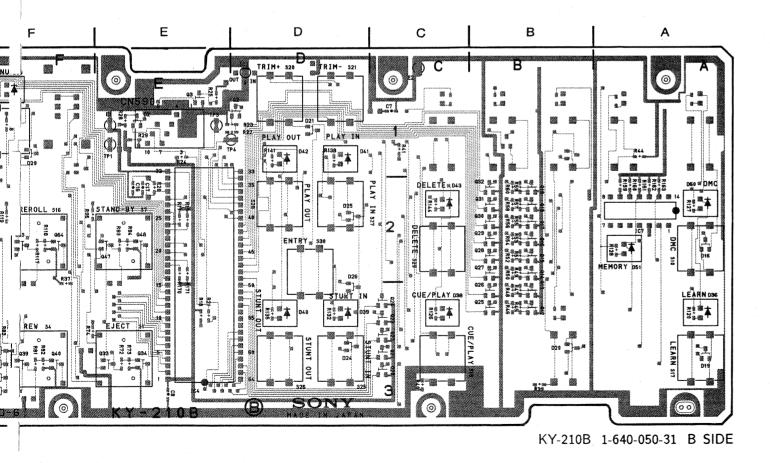


PTC-39 1-633-548-12 B SIDE







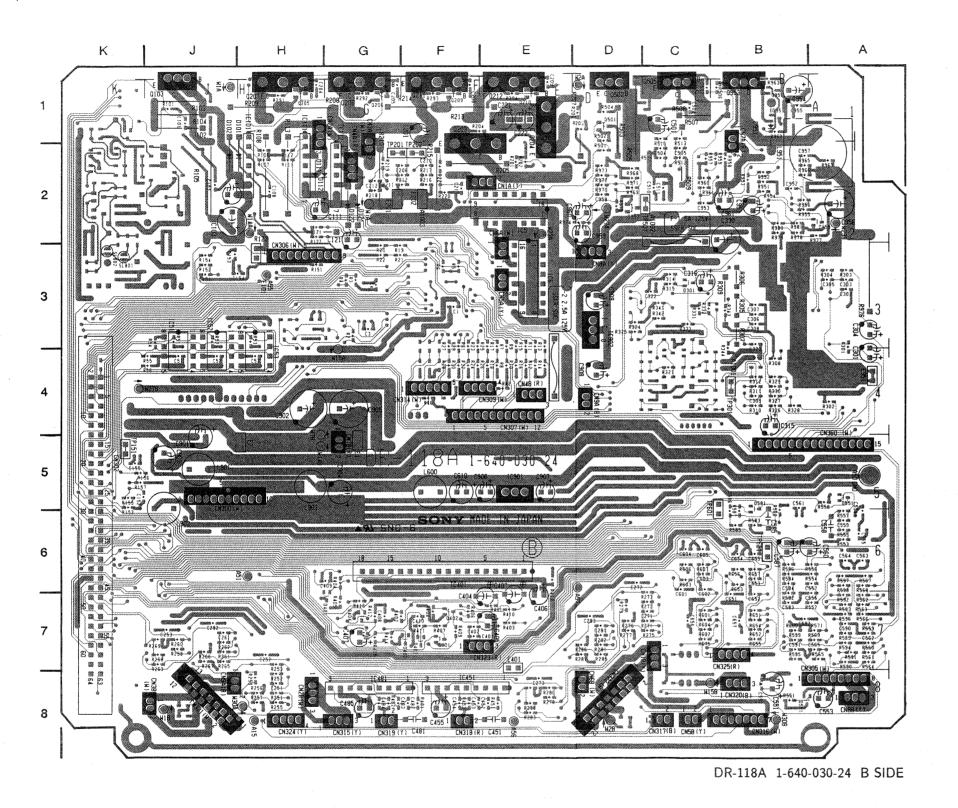


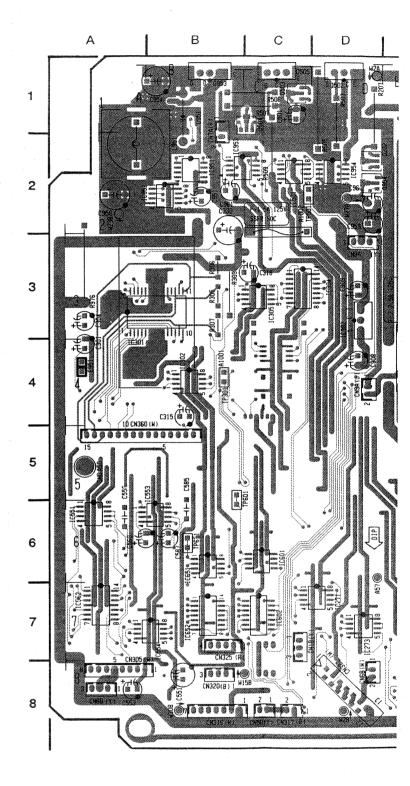
KY-210B(1-640-050-31)

CN2 CN590 CN1003 *D1 *D1 *D2 D4 D5 D6 D7 D8 D9 D10 *D11 *D12 *D13 *D14 *D16 *D19 *D20 *D21 *D23 *D24 *D25 *D26 *D27 *D29 *D36 D38 D39 D40 D41 D42 D43 D49 D51 D55 D56 D57 D58 D59 D60	K-1 E-1 A-1 H-1 F-1 F-1 G-1 G-1 G-3 F-3 F-3 A-3 B-1 D-2 D-3 D-1 D-2 G-3 D-1 D-1 C-3 J-1 K-1 K-1 K-1	*Q13 *Q14 *Q15 *Q16 *Q17 *Q18 *Q19 *Q20 *Q21 *Q22 *Q22 *Q22 *Q23 *Q24 *Q25 *Q26 *Q27 *Q28 *Q30 *Q31 *Q33 *Q34 *Q35 *Q36 *Q37 *Q38 *Q38 *Q39 *Q40 *Q41 *Q42 *Q44 *Q45 *Q46 *Q47 *Q48 *Q48 *Q48	B-3 B-2 B-2 B-2 B-2 B-3 B-3 B-3 B-3 B-3 B-3 B-3 B-3 B-3 B-3	TP3 TP4 X1	E-1 E-1 E-2
D63 D1060 D1061 D1062 D1063 E1 E2 IC2 IC3 IC4 IC5 IC6 IC7 IC8 *Q2 *Q3 *Q4 *Q5 *Q4 *Q5 *Q6 *Q7 *Q7 *Q8 *Q9 *Q10	F-1 A-1 A-1 B-1 B-1 C-1 C-1 D-1 H-3 E-3 K-1 K-1 A-2 H-1 J-1 J-1 J-1 J-1 J-1	\$1 \$2 \$3 \$4 \$5 \$6 \$7 \$10 \$16 \$17 \$19 \$20 \$21 \$24 \$25 \$26 \$27 \$28 \$29 \$30 \$31 \$34 \$35 \$1037	E-3 H-3 G-3 F-3 G-3 J-3 E-2 A-2 F-2 A-3 C-3 D-1 D-1 J-1 D-3 C-2 C-2 C-2 D-2 J-3 F-1 G-1 B-1		
*Q12	B-3	TP2	H-3		

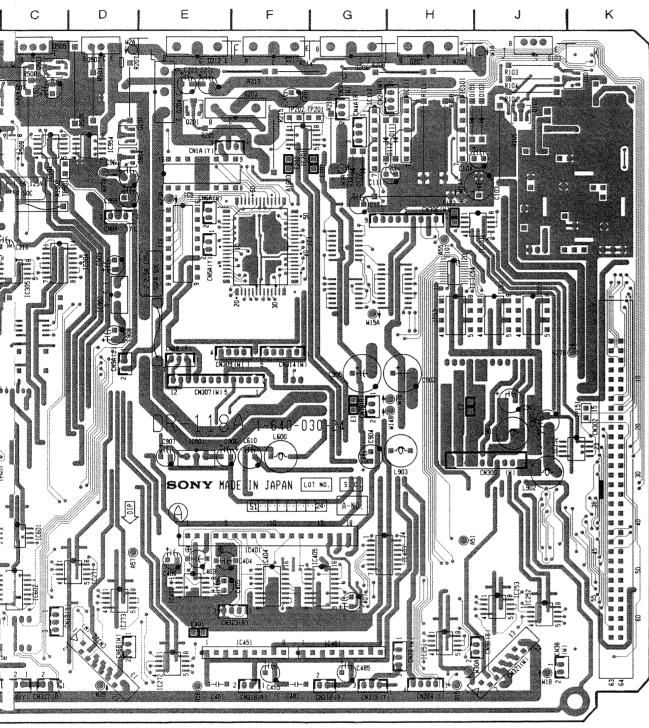
\*; B SIDE

CTL PB, ADJUST DATA STORAGE





DR-118A



DR-118A 1-640-030-24 A SIDE

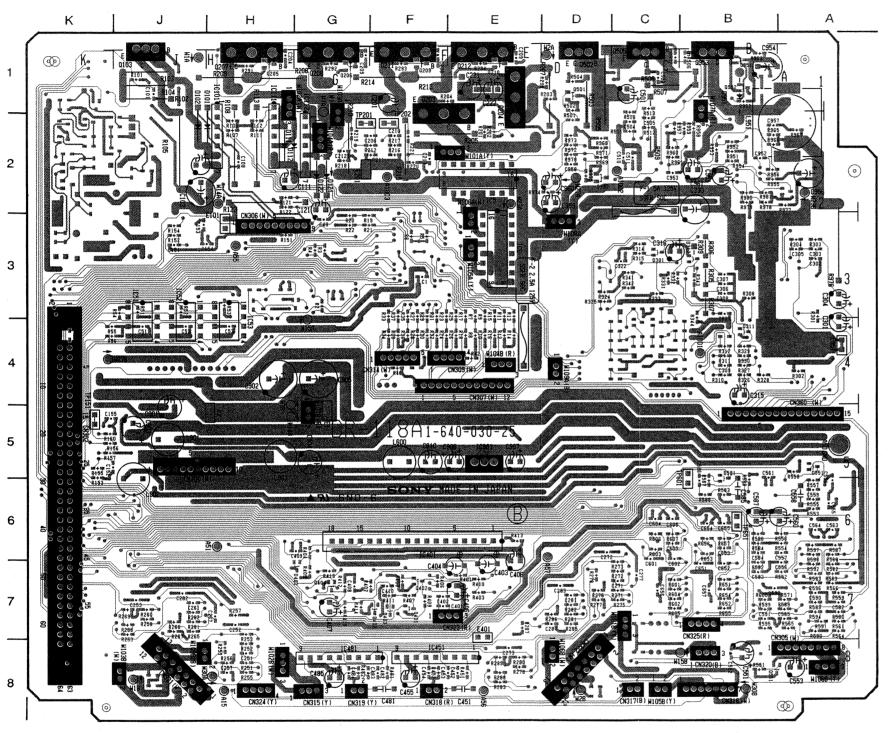
DR-118A	(1-640-030-	-24)			
CN1A CN1B CN2A CN2B CN3A CN3B CN4A CN4B CN5B CN6A CN6B CN7A CN7B CN8A CN8B CN9B CN300 CN302 CN305 CN306 CN307 CN309 CN314 CN315 CN316 CN317 CN318 CN319 CN312 CN322 CN323 CN324 CN323	E-2 C-7 H-18 G-28 G-38 G-38 G-38 G-38 G-38 G-38 G-48 G-88 G-88 G-88 G-88 G-88 G-88 G-8	IC54 IC101 IC111 IC111 IC112 IC151 IC152 IC201 IC251 IC252 IC253 IC271 IC272 IC273 IC301 IC302 IC304 IC305 IC401 IC402 IC403 IC404 IC405 IC401 IC551 IC552 IC553 IC554 IC601 IC652 IC901 IC902 IC951 IC952 IC953	H-3 H-11 G-13 F-28 J-77 F-8 D-44 B-C-36 G-76 G-76 G-76 G-76 G-76 G-76 G-76 G-7	Q505 *Q551 *Q951 *Q952 Q953 Q954 Q955  TP151 TP201 TP202 TP301 TP501 TP601 TP651	C-1 B-8 B-1 B-1 D-2 A-2 K-5 G-2 F-2 B-4 C-2 B-6 B-6
D101 D102 D111 D121 D122 *D301 *D401 *D402 *D403 *D551 *D581 D951	H-1 J-1 H-2 G-2 G-3 G-7 F-7 A-5 A-6 B-1	L600 L901 L902 L903 L951 Q101 Q102 Q103 Q201	D-2 F-5 J-5 J-5 H-5 B-2 K-1 J-2 J-1 E-1		
*D952 E1 E2 E101 E201 E401 E951 F1 F2 IC1 IC5 IC6 IC51 IC52 IC53	D-2 G-5 H-5 H-3 G-2 E-8 A-4 C-2 E-4 F-3 E-2 E-3 J-3 J-3 H-4	Q202 Q203 Q204 *Q205 *Q206 Q207 Q208 *Q209 *Q210 Q211 Q212 *Q401 *Q402 *Q402 *Q404 *Q501 Q502 Q503 Q504	D-2 F-1 E-1 H-1 G-1 H-1 E-1 F-1 E-1 F-7 G-7 D-1 C-1 C-1		

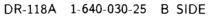
\*: B SIDE

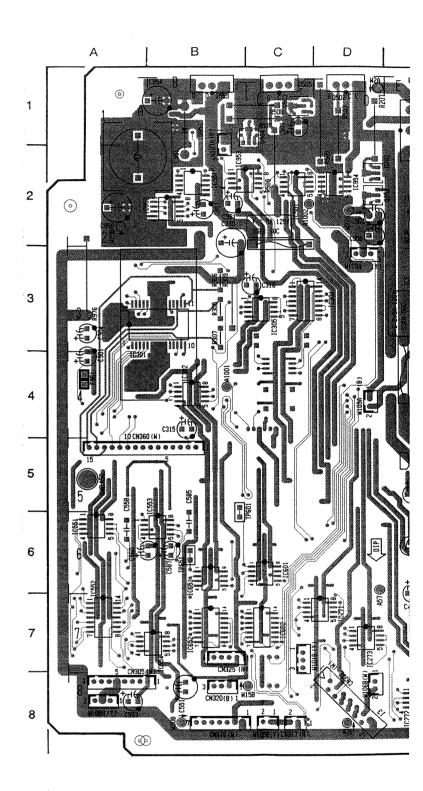
DR-118A

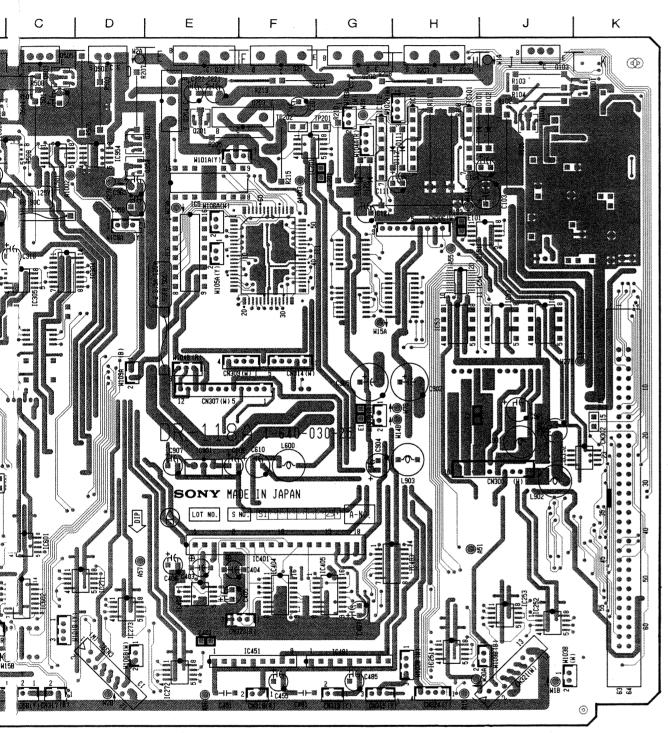
DR-118A

# R 18A; MOTOR DRIVER, SOLENOID DRIVER, SENSOR INPUT, TENSION AMPLIFIER, FG AMPLIFIER, CTL PB, ADJUST DATA STORAGE







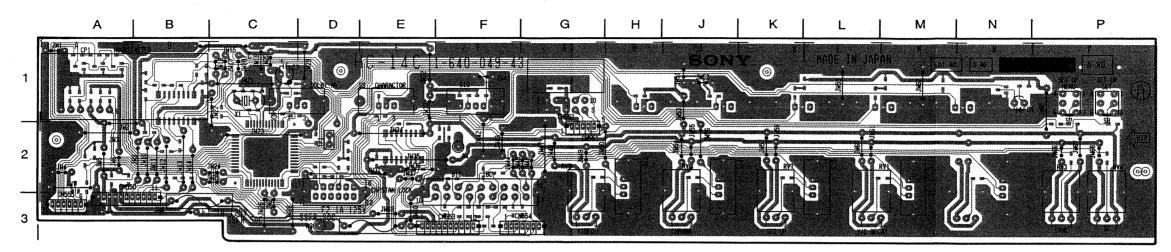


DR-118A 1-640-030-25 A SIDE

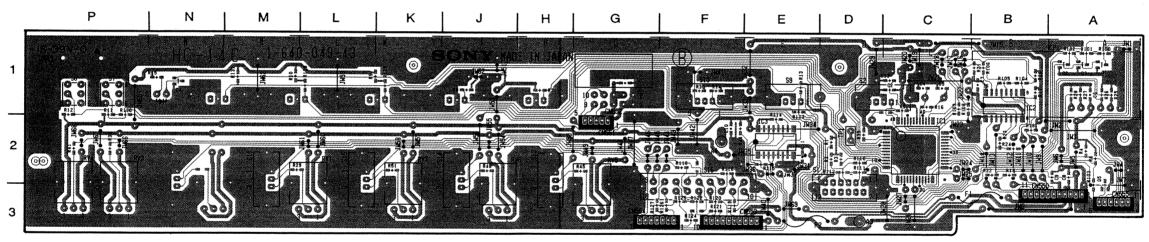
DR-118A	(1-640-030	)-25)			
CN151 CN152 CN153 CN300 CN302 CN305 CN306 CN307 CN309 CN311 CN312 CN314 CN315 CN316 CN317 CN318 CN319 CN320 CN321 CN322 CN322 CN323 CN324 CN325 CN323 CN324 CN325 CN330 CN360 D101 D102 D111 D112	J-3 J-4 J-6 K-8 H-4 F-4 F-8 F-8 B-8 B-8 B-7 B-7 A-1 J-1 H-2 H-2	IC253 IC271 IC272 IC273 IC301 IC302 IC304 IC305 IC401 IC402 IC403 IC404 IC405 IC451 IC451 IC551 IC552 IC553 IC554 IC601 IC602 IC651 IC652 IC951 IC952 IC953 IC954	J-7 D-7 E-8 D-7 A-4 B-3 C-3 F-6 E-7 H-7 F-7 F-8 G-8 C-2 A-6 A-7 A-5 B-6 B-7 E-5 B-2 B-2 B-2	*Q808 *Q809 *Q951 *Q952 Q953 Q954  TP151 TP201 TP202 TP601 TP651 TP801 T801	K-2 K-2 B-1 B-1 D-2 K-5 G-2 F-2 B-6 B-6 J-3 K-3
D121 D122 *D301 *D311 *D312 *D401 *D402	G-2 G-2 C-3 B-4 B-3 G-7 F-7	L600 L801 L901 L902 L903 L951	F-5 J-2 J-6 J-6 H-6 B-2		
*D402 *D403 *D551 *D581 D951 *D952	F-7 A-5 B-5 B-1 D-2	Q101 Q102 Q103 Q201 Q202 Q203	K-1 J-2 J-1 E-2 D-2 F-1		
E1 E2 E101 E201 E801 E951	G-5 H-5 H-3 G-2 K-3 A-4	Q204 *Q205 *Q206 Q207 Q208 *Q209 *Q210 Q211	E-2 H-1 G-1 H-1 G-1 F-1 E-1		
F2 IC1 IC5 IC6 IC51 IC52 IC53 IC54 IC101 IC111 IC112 IC151 IC152 IC251 IC251 IC252	E-3 F-3 E-2 E-3 J-4 J-4 H-3 H-1 H-1 J-3 J-5 F-2 H-8 J-7	*Q212 *Q401 *Q402 *Q404 *Q501 Q502 Q503 Q504 Q505 *Q551 *Q801 *Q802 Q803 *Q804 *Q806 *Q806 *Q807	E-1 F-7 F-7 G-7 D-1 C-1 C-1 C-1 B-8 K-1 K-2 J-2 J-2 K-2 K-2		

\*: B side

## HC-14C; SUB-CONTROL PANEL



HC-14C 1-640-049-43 A SIDE



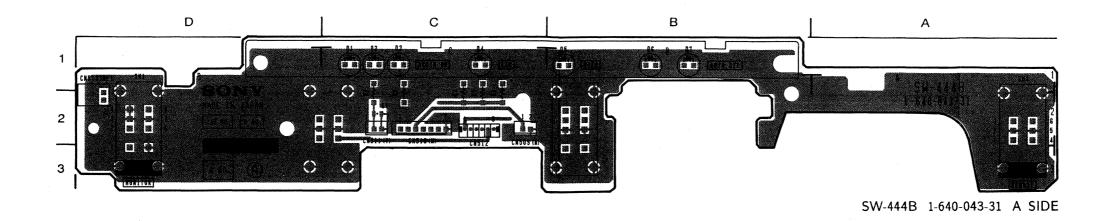
HC-14C 1-640-049-43 B SIDE

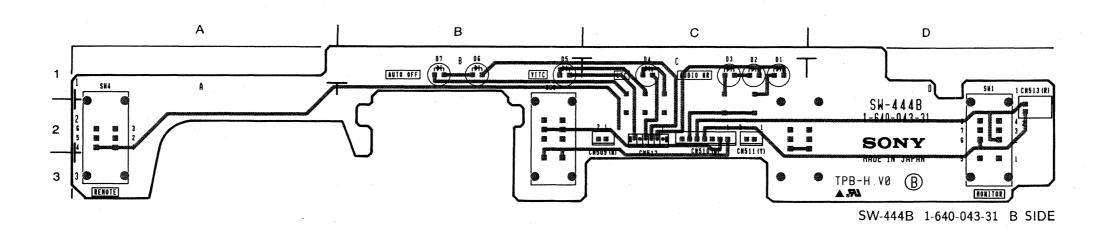
#### HC-14C(1-640-049-43)

CN550 A-3 CN551 G-2 CN552 G-2 CN553 F-3 CN554 G-3 CN555 A-3 CP1 A-1 D1 N-1 F1 F2 B-3 E-3 \*IC1 \*IC2 \*IC3 C-2 B-1 E-2 \*Q1 \*Q2 \*Q3 \*Q4 \*Q5 A-1 A-1 A-1 N-1 A-2 RV1 RV3 RV4 RV5 RV6 RV7 L-2 P-2 P-2 G-2 J-2 K-2 S1 S2 S7 S8 S9 S10 S11 S13 S14 S15 S16 D-2 C-1 P-1 P-1 E-1 F-1 M-2 H-2 J-2 L-2 F-2 TP1 D-2 X1 C-1

\*: B SIDE

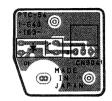
## SW-444B; SELECT SWITCH, INDICATOR, RF/VIDEO LEVEL METER



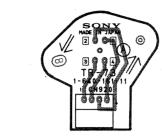


```
*CN509 C-2
CN510 C-2
CN511 C-2
CN512 C-2
CN513 D-2
D1 C-1
D2 C-1
D3 C-1
D4 C-1
D5 B-1
D6 B-1
D7 B-1
SW1 D-2
SW4 A-2
```

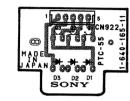
\*; B SIDE



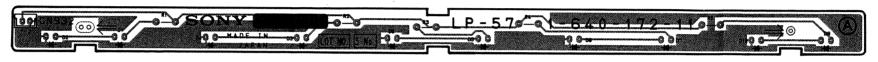
PTC-54 1-640-163-12 A SIDE



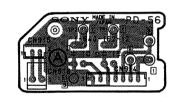
TR-73 1-640-161-11 A SIDE



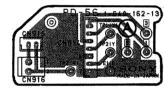
PTC-55 1-640-165-11 A SIDE



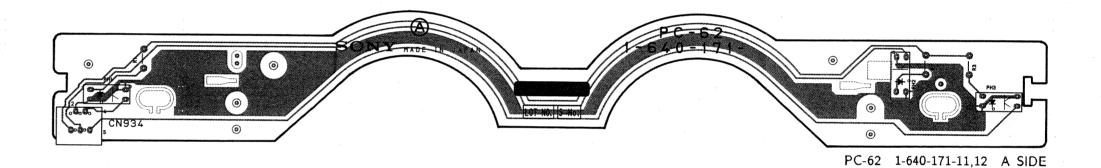
LP-57 1-640-172-11 A SIDE

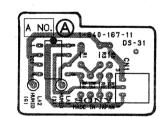


PD-56 1-640-162-12 A SIDE

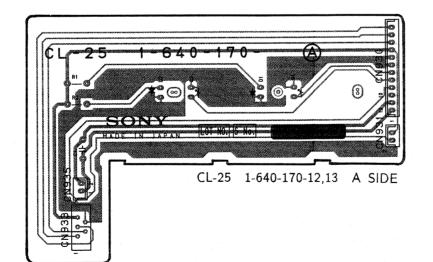


PD-56 1-640-162-13 A SIDE



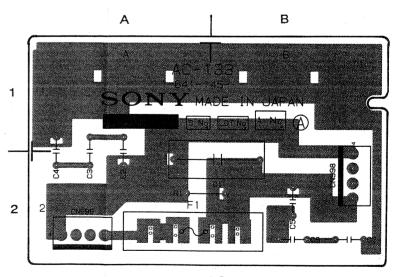


DS-31 1-640-167-11 A SIDE





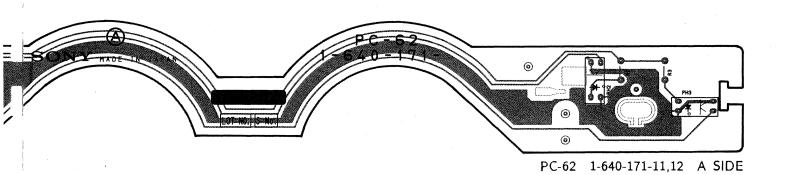
DE-15 1-622-606-12 A SIDE

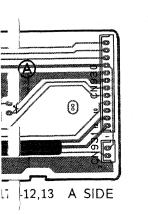


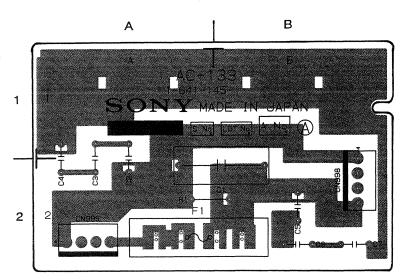
AC-133 1-641-145-12 A SIDE



LP-57 1-640-172-11 A SIDE







AC-133 1-641-145-12 A SIDE

RM-82; REEL MOTOR

PTC-42; CASSETTE SIZE SENSOR PTC-49; THREADING MOTOR

PTC-54; THREADING FG

PTC-55; CASSETTE INFORMATION SENSOR (TAPE THICKNESS, REEL HUB DIAMETER,

METAL/OXIDE)

PD-56; PINCH/CLEANING SOLENOID CONNECTION, REEL FG CHECK

DS-31; CONDÉNSATION SENSOR TR-73; S/T TENSION SENSOR

DE-15; REEL FG

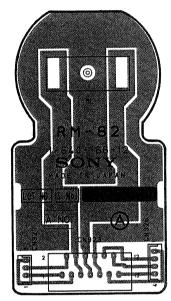
LP-57; CASSETTE ILLUMINATION

PC-62; CASSETTE IN/LARGE CASSETTE SENSOR

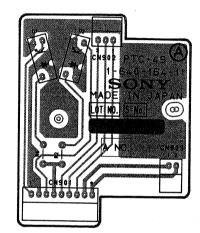
CL-25; CASSETTE COMPARTMENT (CASSETTE LOADING BEGIN/NEAR-END SENSOR,

LP-57 CONNECTION, CASSETTE LOADING MOTOR)

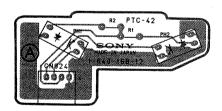
AC-133; AC LINE FILTER, FUSE



RM-82 1-640-166-12 A SIDE



PTC-49 1-640-164-11 A SIDE

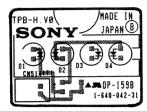


PTC-42 1-640-168-12 A SIDE

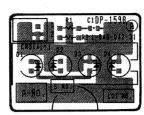
DP, FRAME(2)

FRAME(2), DP

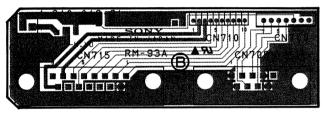
DP-159B; RF/VIDEO METER BACK LIGHT RM-93A; TBC REMOTE CONNECTOR



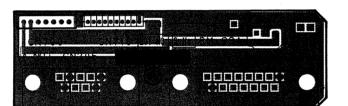
DP-159B 1-640-042-31 B SIDE



DP-159B 1-640-042-31 A SIDE

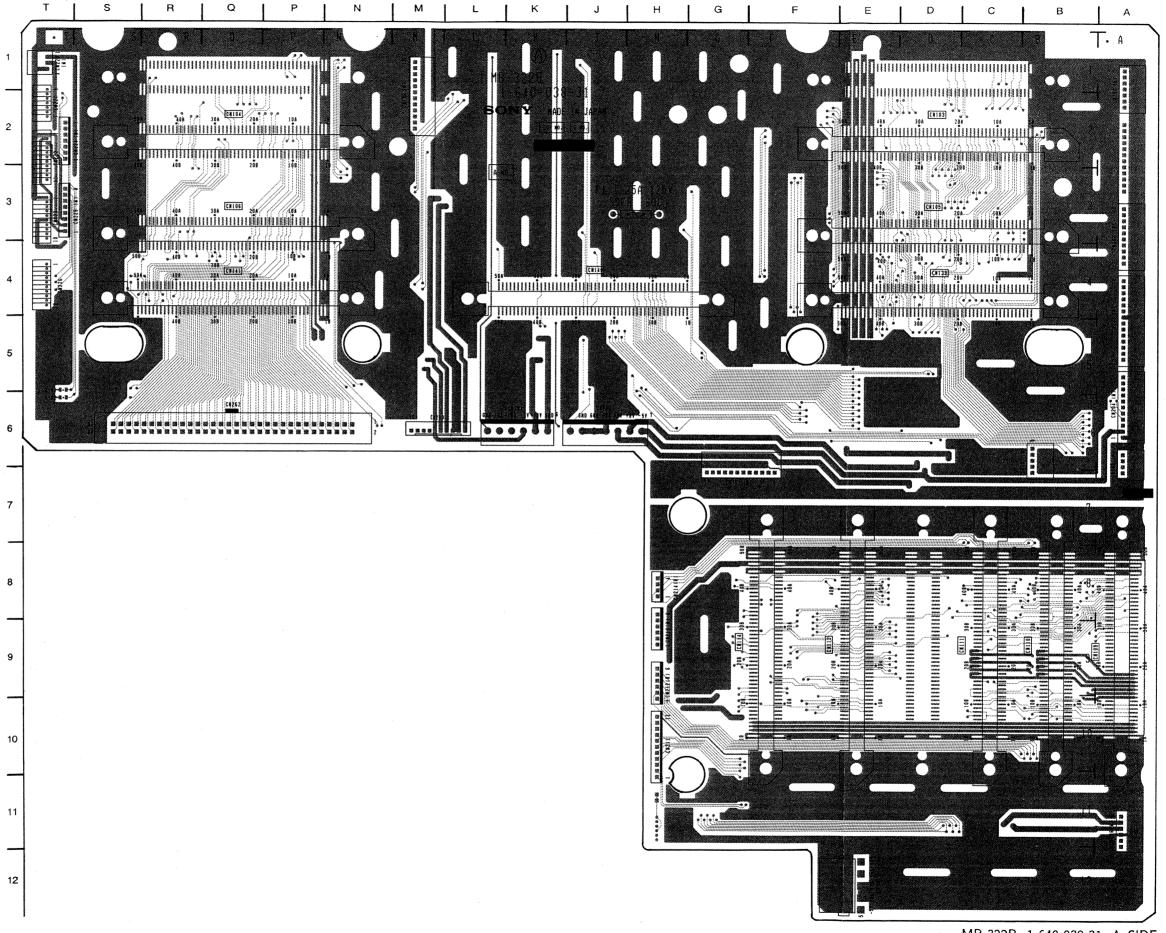


RM-93A 1-640-048-21 B SIDE



RM-93A 1-640-048-21 A SIDE

MB-322B; MOTHER BOARD

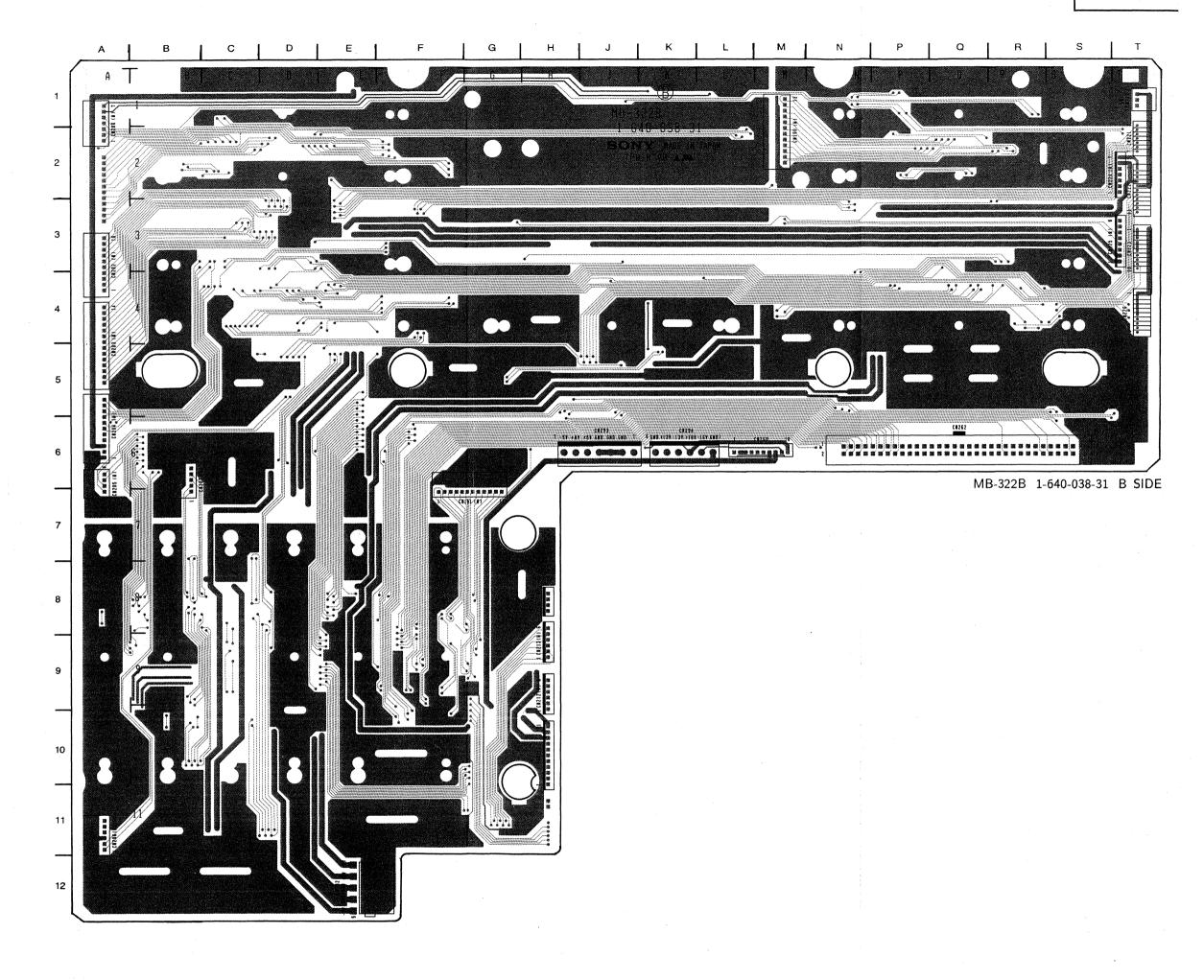


#### MB-322B(1-640-038-31)

```
CN103 D-2
CN104 Q-2
CN105 D-3
CN106 Q-3
CN109 A-9
CN111 C-9
CN113 F-9
CN114 G-9
CN140 J-4
CN140 J-4
CN150 M-2
CN151 G-7
CN200 A-2
CN202 A-4
CN203 A-5
CN204 A-6
CN205 A-6
CN205 A-6
CN205 A-6
CN205 A-6
CN201 H-10
CN212 H-9
CN211 H-10
CN212 H-9
CN213 H-9
CN213 H-9
CN214 H-8
CN220 T-1
CN221 T-2
CN221 T-2
CN222 T-2
CN223 T-3
CN224 S-2
CN225 S-3
CN226 T-4
CN260 M-6
CN262 Q-6
CN292 E-12
CN293 J-6
CN294 K-6
```

\*; B SIDE

MB-322B; MOTHER BOARD



#### MB-322B(1-640-038-31)

```
CN103
CN104
CN105
CN106
CN109
CN111
CN113
CN114
CN139
CN140
CN151
CN200
CN202
CN203
CN204
CN205
CN206
CN207
CN211
CN211
CN211
CN212
CN213
CN214
CN220
CN221
CN223
CN224
CN226
CN223
CN224
CN225
CN226
CN260
CN260
CN260
CN260
CN260
CN260
CN260
CN262
CN293
CN294
                                           D-2
Q-2
D-3
                                           Q-3
A-9
B-9
C-9
F-9
D-4
J-4
Q-4
M-2
G-7
A-2
A-4
A-5
A-6
                                             A-6
                                             A-11
                                             B-6
                                             H-10
                                             H-9
                                             H-9
                                             H-8
                                            T-1
T-2
T-2
T-3
S-2
S-3
T-4
                                              M-6
                                            Q-6
E-12
                                             J-6
                                              K-6
 F1
                                               J-3
```

\*; B SIDE

# SECTION 16 SCHEMATIC DIAGRAM

# CIRCUIT CONFIGURATION

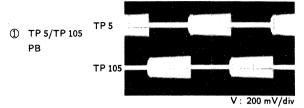
The circuit information is provided below.

System	Board	Circuit Function				
	RP-57BP					
	VP-33BP	RF PB Amplifier				
VIDEO	VF-33BP	Y/C PB Process (PB RF EQ, Demod., Encode, Y-RF Envelope				
,	TDC 10D	DET), Composite Out Driver				
	TBC-18P CP-166A	Time Base Corrector, CTDM (Expand)				
	AU-148AP	Output Connector, Component Out Driver				
	AU-140AP	,				
	AU-150A	CH-2 PB Process, Dolby System Mode Control, LTC PB				
AUDIO	CP-167A					
nobio	DP-138B	Input/Output Connector, Line Out Driver				
	VR-116B	Audio Level Meter Back Light				
	MA-44B	PB Level Control, Headphone Volume Control				
	SS-48P	Meter Driver, Headphone Amplifier				
	55-46F	System Control, Servo System Main, Time Code Reader, Character Generator				
	DT-29AP					
	DT-30	Dynamic Tracking				
	KY-210B	Dynamic Tracking Keyboard				
	DP-139B	Time Code Display				
	1					
	DR-118A	Motor Driver, Solenoid Driver, Sensor Input, Tension Amplifier, FG Amplifier, CTL PB, Adjust Data Storage				
	CL-25	Cassette Compartment (Cassette Loading Begin/Near-end Sensor, LP-57 Connection, Cassette Loading Motor)				
SERVO/	DE-15	Reel FG				
SYSTEM	DS-31	Condensation Sensor				
CONTROL/	HC-14C	Sub-control Panel				
TIME CODE	PC-62	Cassette In/Large Cassette Sensor				
	PD-56	Pinch/Cleaning Solenoid Connection, Reel FG Check				
	PTC-39	Search Dial				
	PTC-42	Cassette Size Sensor				
	PTC-49	Threading Motor				
	PTC-54	Threading FG				
	PTC-55	Cassette Information Sensor (Tape Thickness, Reel Hub Diameter,				
		Metal/Oxide)				
	RM-82	Reel Motor				
	RM-93A	TBC Remote Connector				
	SW-444B	Select Switch, Indicator, RF/Video Level Meter				
	TR-73	S/T Tension Sensor				
	AC-133	AC Line Filter, Fuse				
OTHERS	DP-159B	RF/Video Meter Back Light				
	LP-57	Cassette Illumination				
	MB-322B	Mother Board				

	Board	rage
Α	AC-133 ·····	16-173
	AU-148AP	
	AU-149AP	
	AU-150A · · · · · · · · · · · · · · · · · · ·	
c	CL-25 ·····	16-173
	CP-166A ·····	
	CP-167A ·····	
D	DE-15 ·····	16-173
	DP-138B · · · · · · · · · · · · · · · · · · ·	16-83
	DP-139B · · · · · · · · · · · · · · · · · · ·	16-138
	DP-159B · · · · · · · · · · · · · · · · · · ·	16-175
	DR-118A ·····	16-142
	DS-31 ·····	16-173
	DT-29AP	16-118
	DT-30 ·····	16-122
Н	HC-14C	16-158
K	KY-210B	16-138
Ľ	LP-57 ·····	16-173
М	MA-44B ·····	16-83
	MB-322B ·····	16-163
Р	PC-62 ·····	16-173
	PD-56 ·····	16-173
	PTC-39 ·····	
	PTC-42 ·····	
	PTC-49	
	PTC-54	
	PTC-55	16-173
R	RM-82 ·····	
	RM-93A ·····	
	RP-57BP	16-4
S	SS-48P	
	SW-444B	16-161
Т	TBC-18P ·····	16-48
	TR-73 ·····	16-173
V	VP-33BP	16-12
	VR-116B	16-83

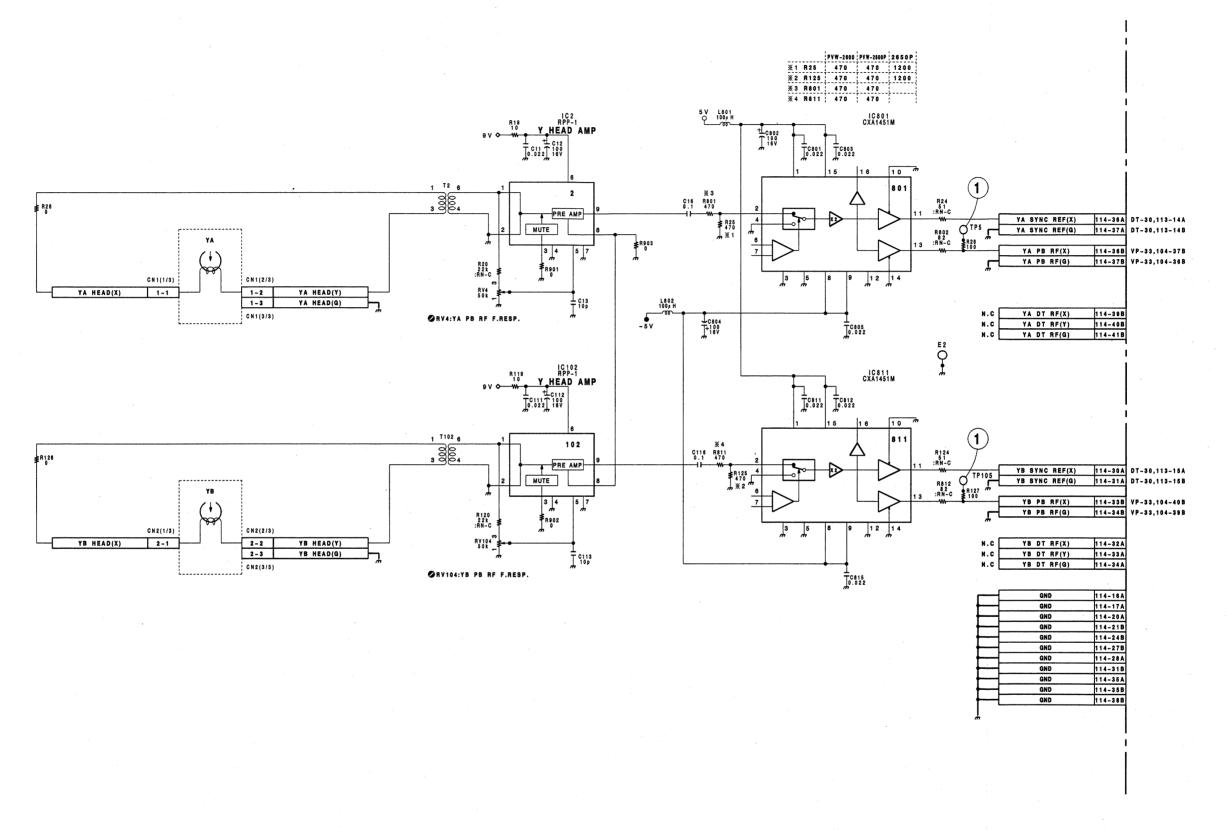
#### RP-57BP(1-640-034-24)

TP5 A-6 TP105 B-6 TP205 D-6 TP305 D-6



H: 10 ms/div

## RP-57BP(1/2); Y RF AMPLIFIER



# RP-57BP BOARD (1/2)

BOARD NO.1-640-034-24 PVW-2650P(EK);#10001-

16-5

16-5

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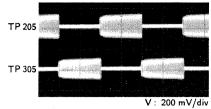
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·H

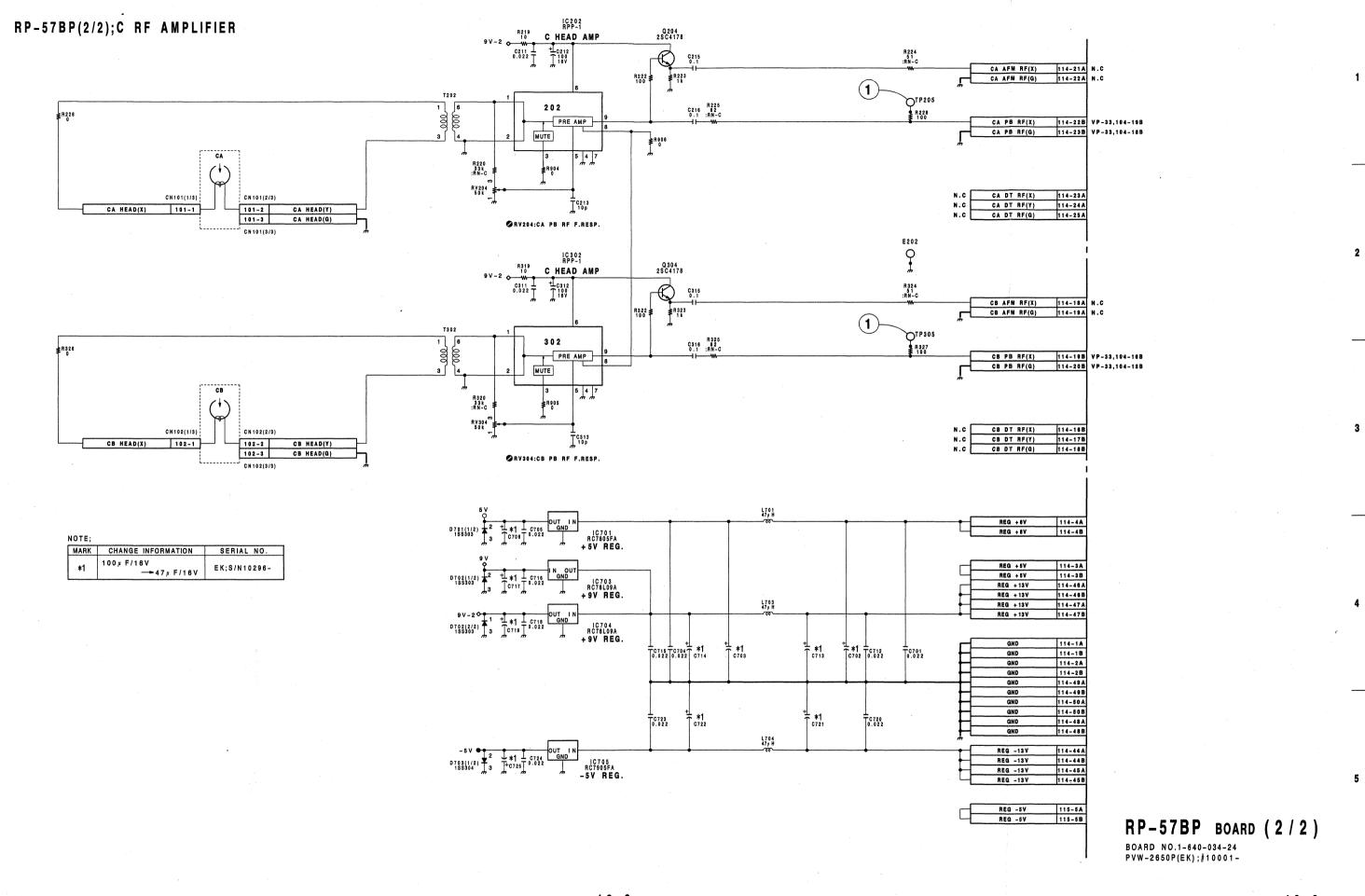
### RP-57BP(1-640-034-24)

TP5 A-6 TP105 B-6 TP205 D-6 TP305 D-6

① TP 205/TP 305 PB



H: 10 ms/div



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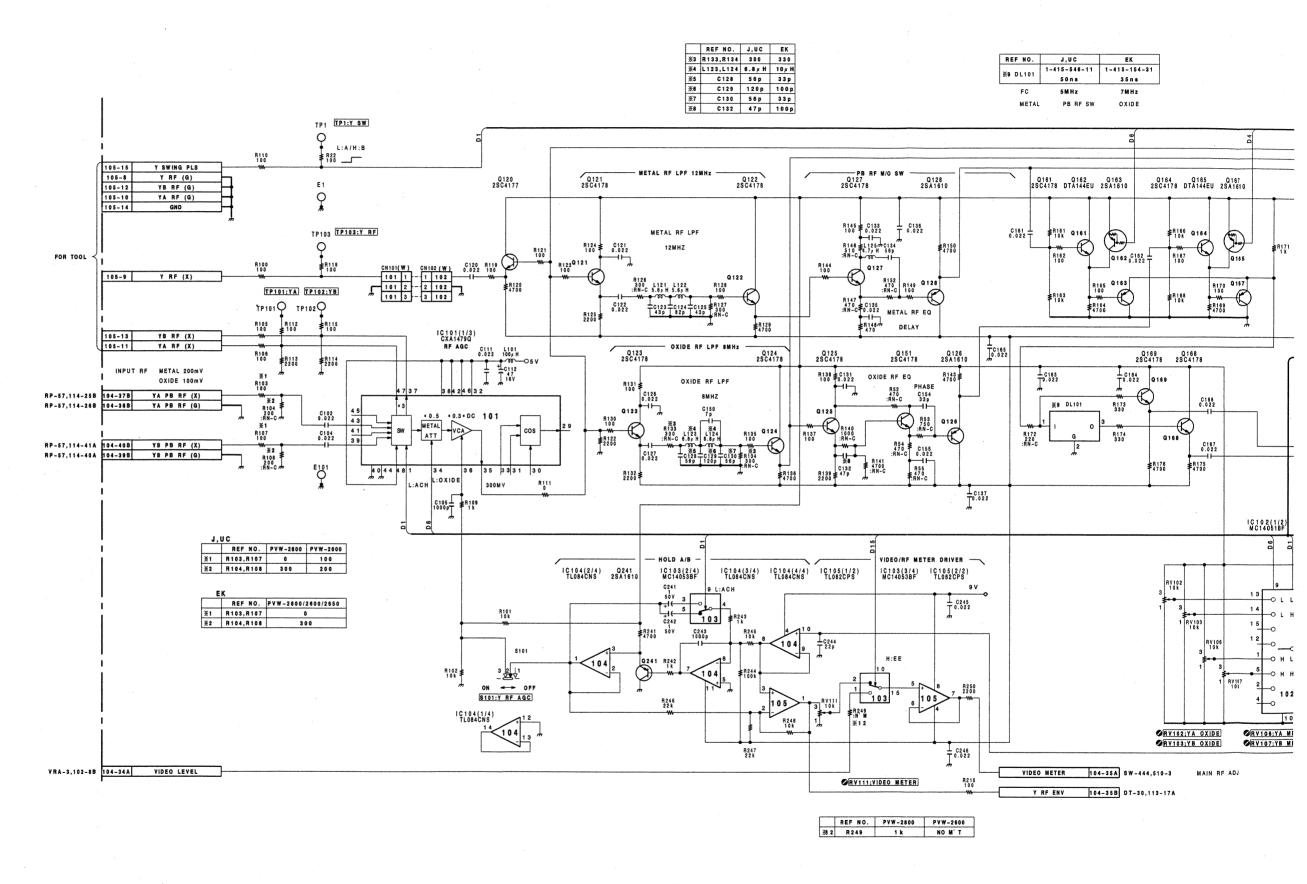
G

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#### VP-33BP (1-640-032-13,14)

TP1 D-1
TP2 F-1
TP101 D-1
TP102 C-1
TP103 D-1
TP105 C-4
TP106 B-4
TP107 A-4
TP108 D-6
TP201 B-4
TP202 D-1
TP204 C-1
TP205 C-3
TP401 F-1
TP402 F-1
TP403 F-1
TP406 F-4
TP505 G-3
TP407 F-4
TP505 G-3
TP701 N-3
TP702 N-4
TP504 H-2
TP505 G-3
TP701 N-3
TP702 N-4
TP703 M-6
TP704 N-6
TP705 N-6
TP706 N-6
TP707 P-6
TP708 P-6
TP708 P-6
TP709 C-6
TP709 C-6
TP709 C-6
TP710 M-6
TP711 K-1
TP711 K-1

### VP-33BP(1/9); Y RF AGC, Y DO ENVELOPE DETECT



16-13

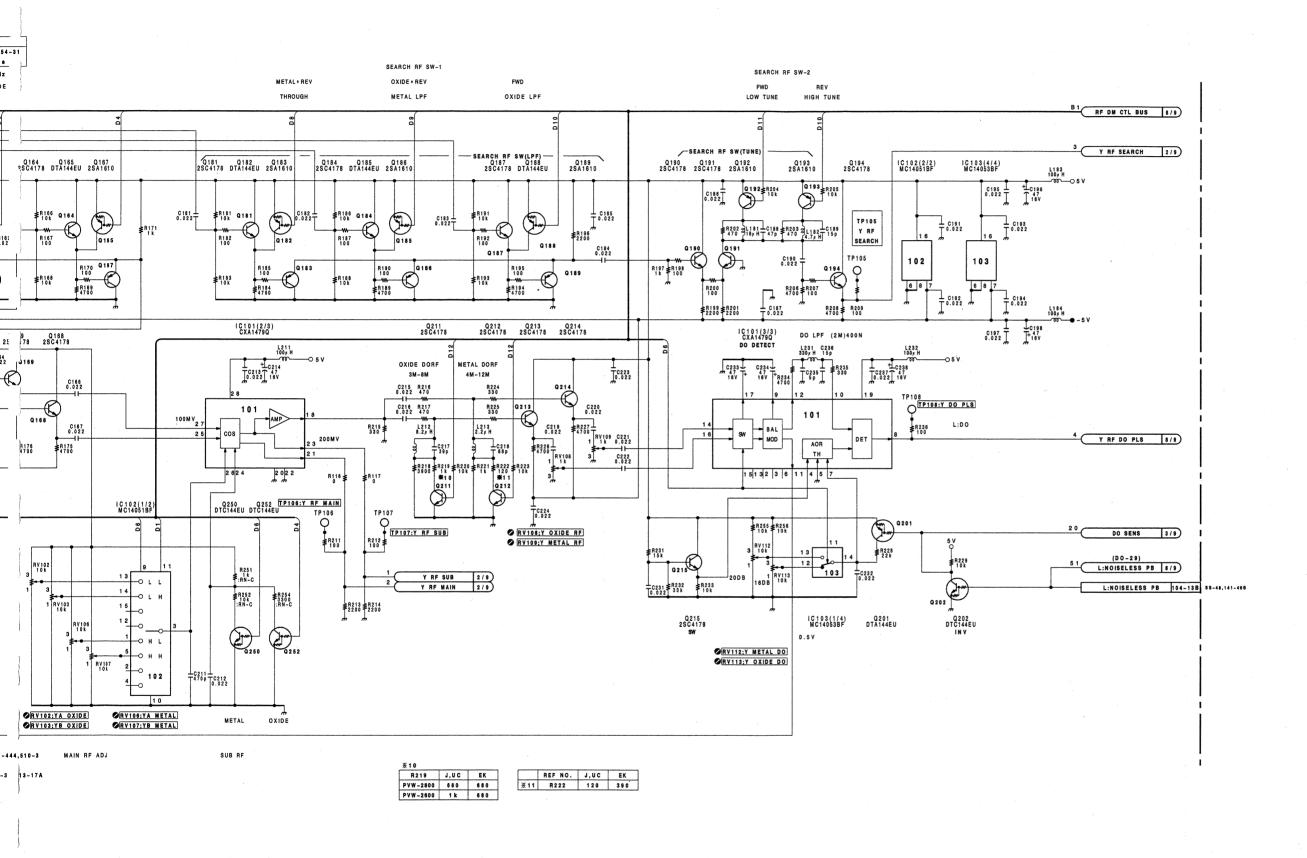
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VP-33BP BOARD (1/9)

BOARD NO.1-640-032-13,14 PVW-2650P(EK);#10001-

16 - 13

#### VP-33BP (1-640-032-13,14)

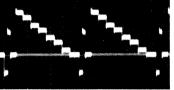
VF-33DF	(1-040-0
TP1 TP2 TP101 TP102 TP103 TP105 TP106 TP107 TP108 TP201 TP202 TP204 TP205 TP401 TP402 TP403 TP406 TP407 TP408 TP501 TP502 TP504 TP505 TP701 TP702 TP703 TP704 TP705 TP705 TP705 TP705 TP705 TP705 TP706 TP707 TP708 TP707 TP708 TP709 TP711 TP712 TP713 TP714 TP715 TP716 TP717	D-1 F-1 D-1 D-1 D-1 D-1 B-4 D-1 F-1 F-4 F-4 F-4 H-1 SN-4 NN-6 F-6 M-6 K-1 L-1

- ① TP 201
- РΒ
- ② TP 202 РΒ
- ③ TP 204 РΒ



V: 200 mV/div H: 2 ms/div



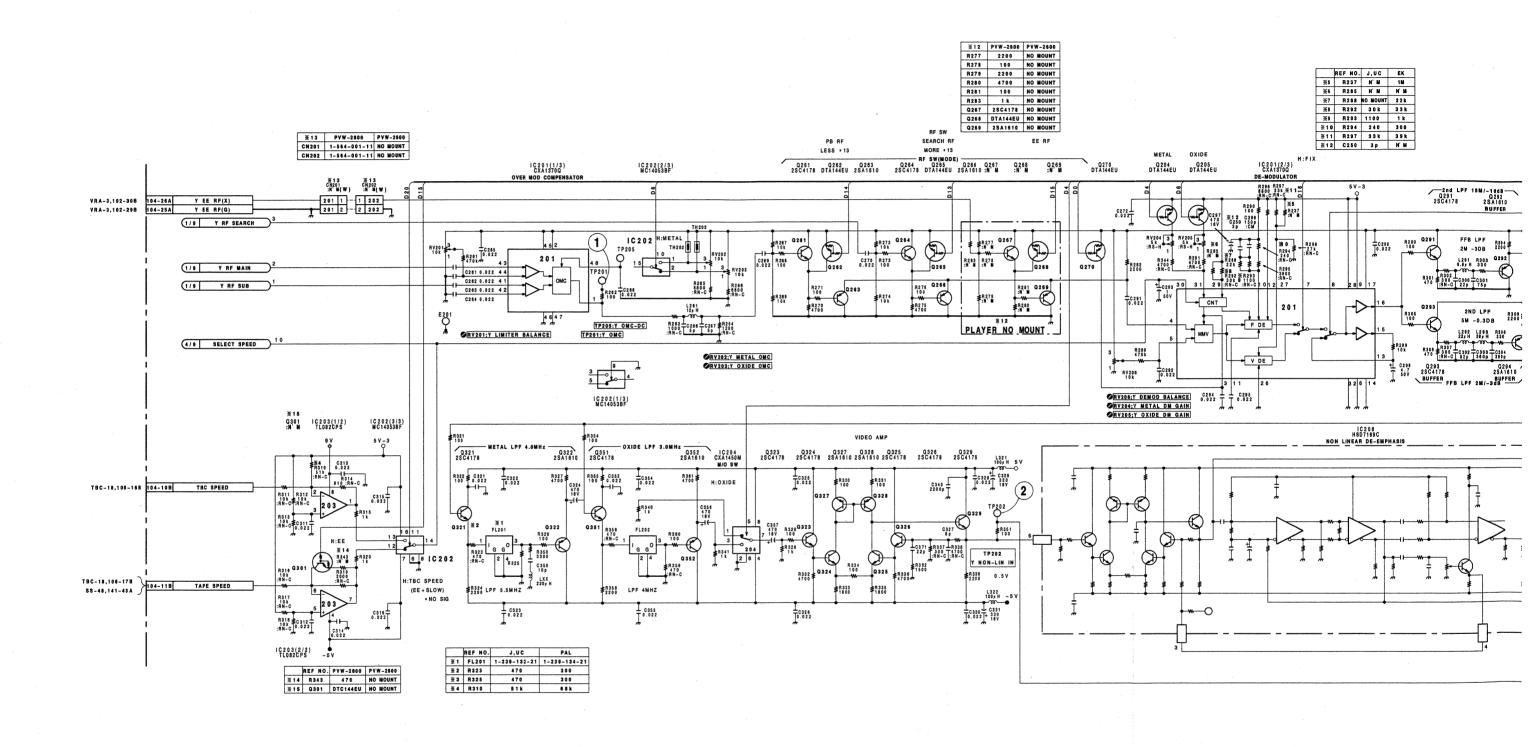


V : 200 mV/div H : 20 μs/div



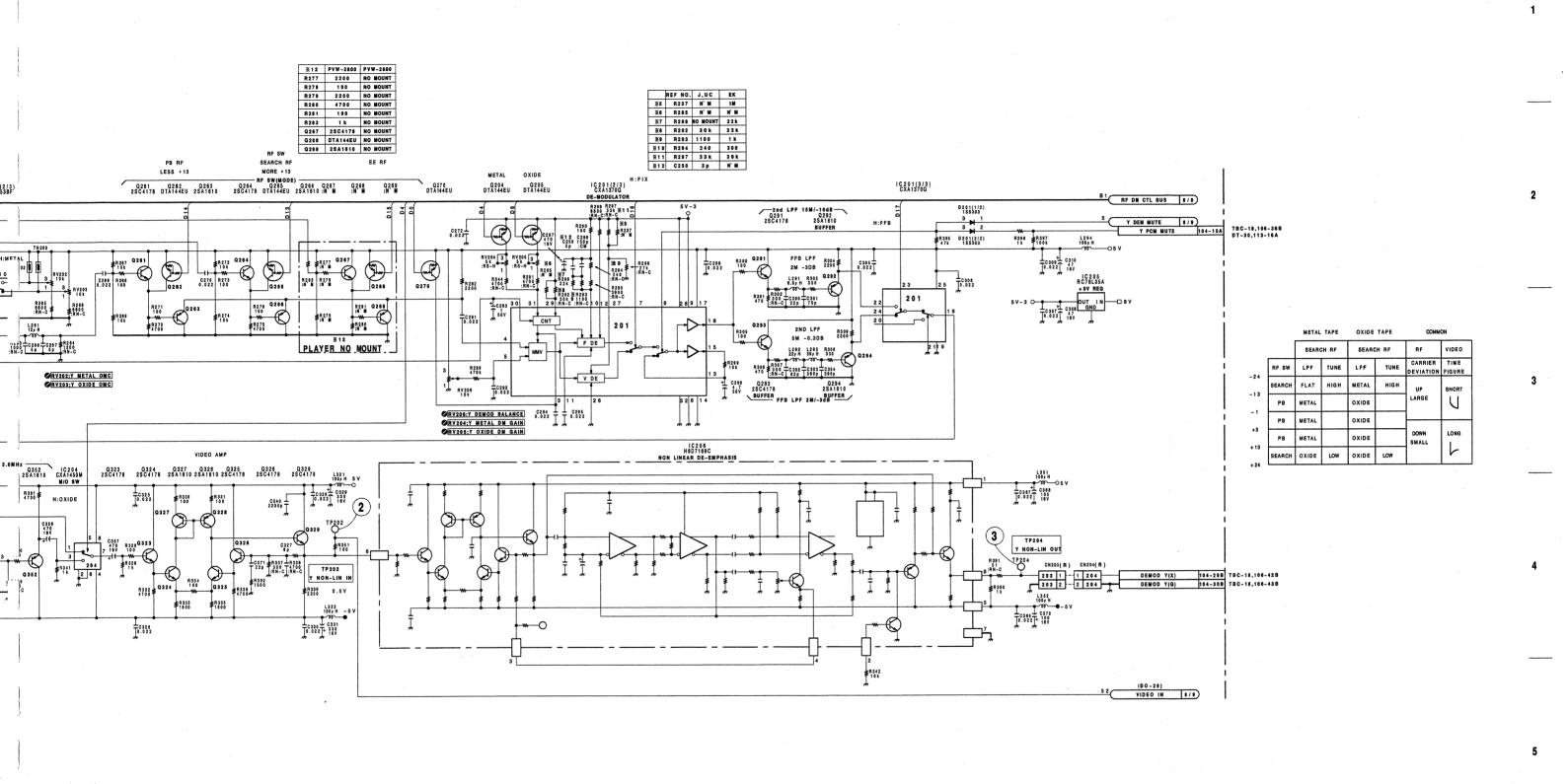
V : 500 mV/div  $H: 20 \, \mu s/div$ 

#### VP-33BP(2/9);DE-MODULATOR,NON LINEAR DE-EMPHASIS



16-17

A C D E G



VP-33BP BOARD (2/9)

BOARD NO.1-640-032-13,14 PVW-2650P(EK);#10001-

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33BP(2/9) VP-33BP(2/9)

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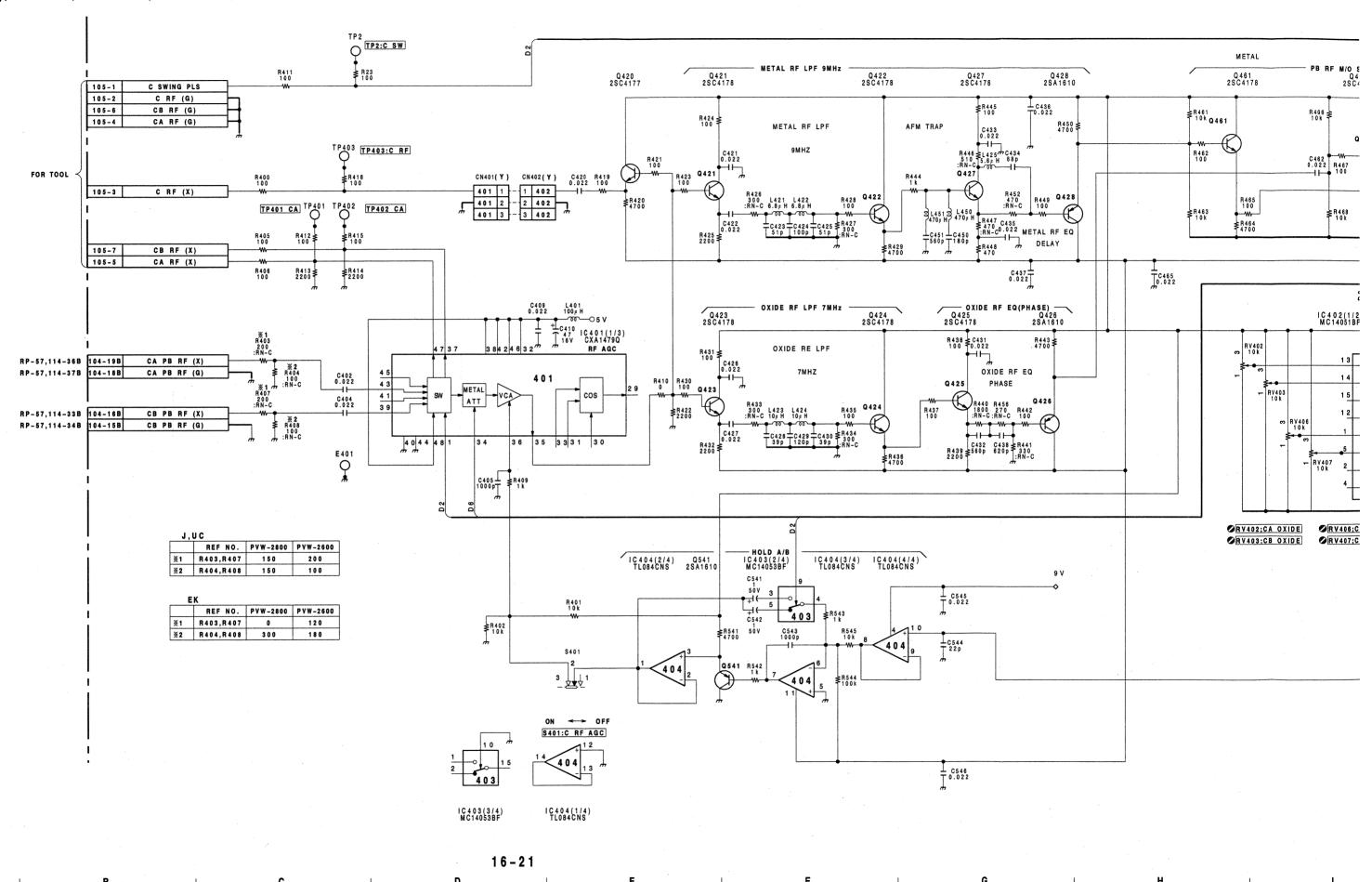
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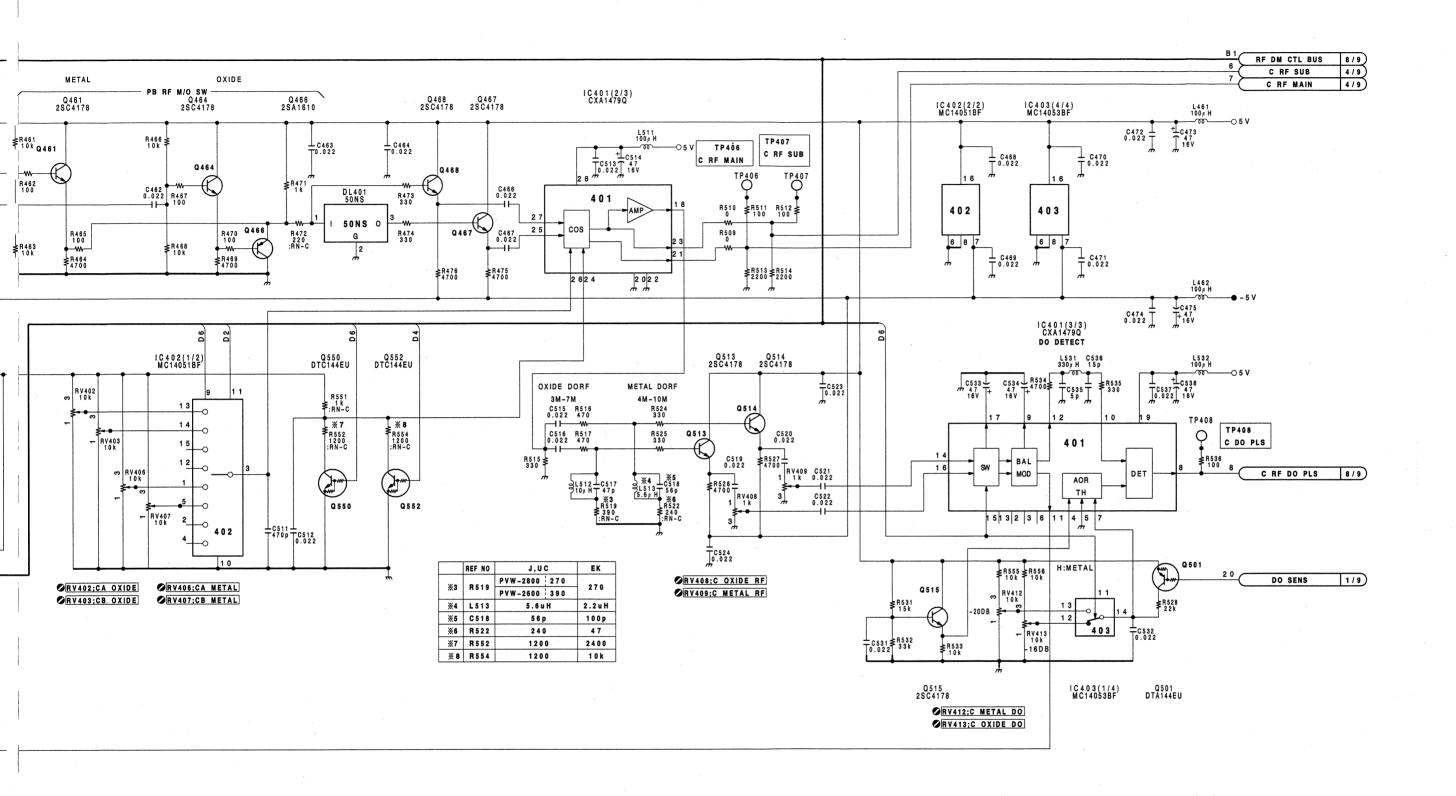
Ĺ

#### VP-33BP (1-640-032-13,14)

TP1 D-1
TP2 F-1
TP101 D-1
TP102 C-1
TP103 D-1
TP105 C-4
TP106 B-4
TP107 A-4
TP108 D-6
TP201 B-4
TP202 D-1
TP204 C-1
TP205 C-3
TP401 F-1
TP402 F-1
TP403 F-1
TP406 F-4
TP407 F-4
TP408 H-6
TP501 G-4
TP501 N-3
TP701 N-3
TP701 N-3
TP702 N-6
TP505 G-3
TP701 N-3
TP702 N-6
TP708 N-6
TP708 N-6
TP708 N-6
TP708 N-6
TP709 N-6
TP709 N-6
TP709 N-6
TP709 N-6
TP709 N-6
TP711 M-6
TP711 M-6
TP711 M-6
TP711 K-1
TP715 K-1
TP716 K-1
TP716 K-1

#### VP-33BP(3/9);C PB EQ,C RF AGC,DO DETECT





# VP-33BP BOARD (3/9)

BOARD NO.1-640-032-13,14 PVW-2650P(EK);#10001-

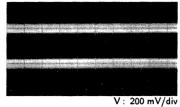
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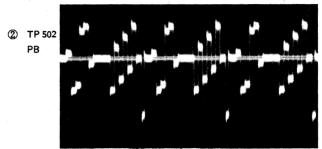
#### VP-33BP (1-640-032-13,14)

TP1 TP2 TP101 F-1 D-1 C-1 D-1 C-4 B-4 A-4 D-6 TP102 TP103 TP105 TP106 TP107 TP108 TP201 TP202 TP204 TP205 TP401 TP402 TP403 TP406 TP407 TP408 TP501 TP501 TP504 TP505 TP505 TP701 B-4 D-1 C-1 C-3 F-1 F-1 F-4 H-6 G-4 H-1 H-2 G-3 N-3 N-4 TP701 TP702 TP703 TP704 TP705 M-6 N-6 N-6 N-6 P-6 P-6 **TP706 TP707 TP708** TP709 K-6 J-6 M-6 M-4 M-6 K-4 K-1 K-1 TP709 TP710 TP711 TP712 TP713 TP714 TP715 TP716 TP717

① TP 501 PB



V: 200 mV/a H: 20 μs/div



V: 200 mV/div

H : 20 μs/div

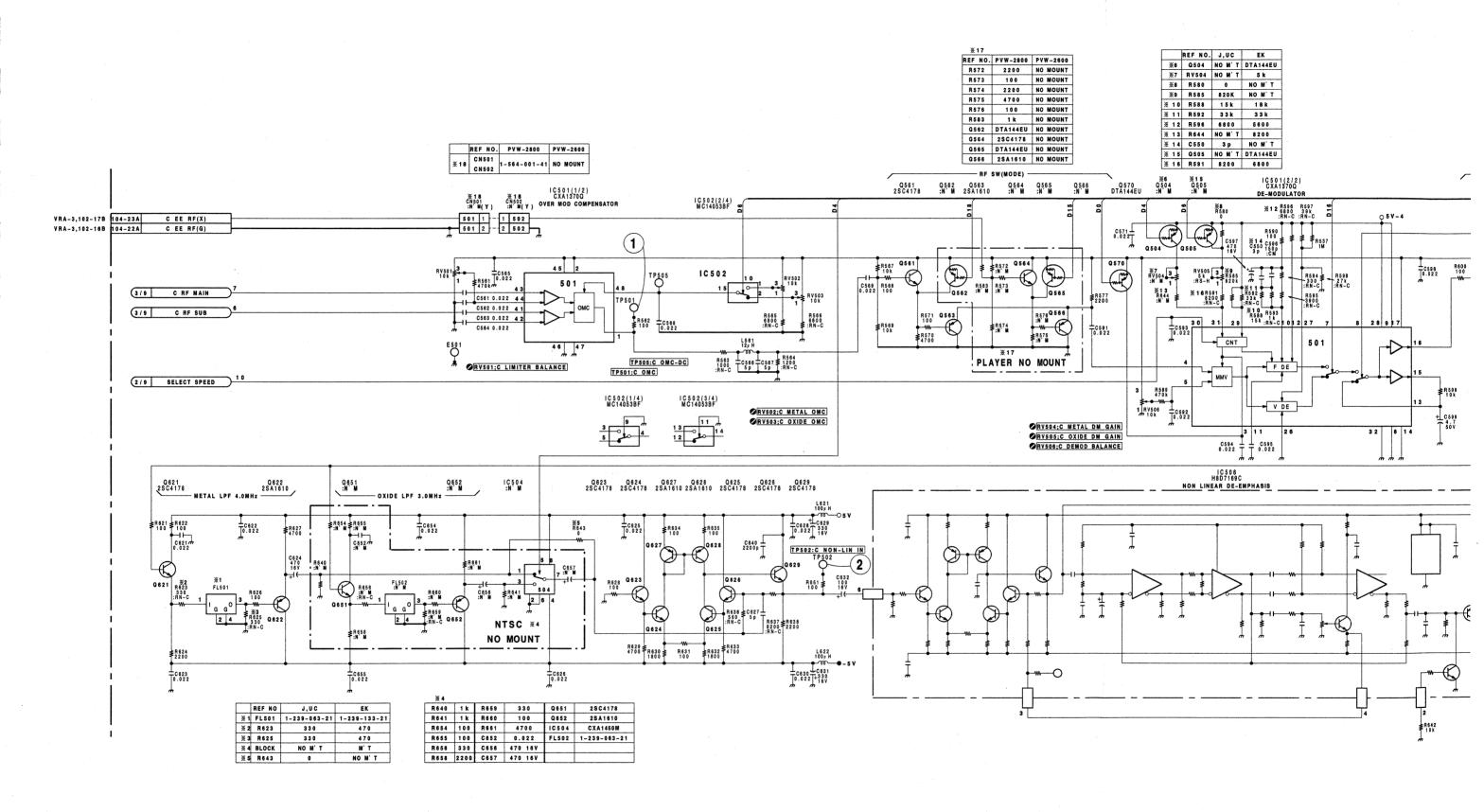
③ TP 504 PB



V : 500 mV/div

H : 20 μs/div

#### VP-33BP(4/9); C DE-MODULATOR, NON LINEAR DE-EMPHASIS



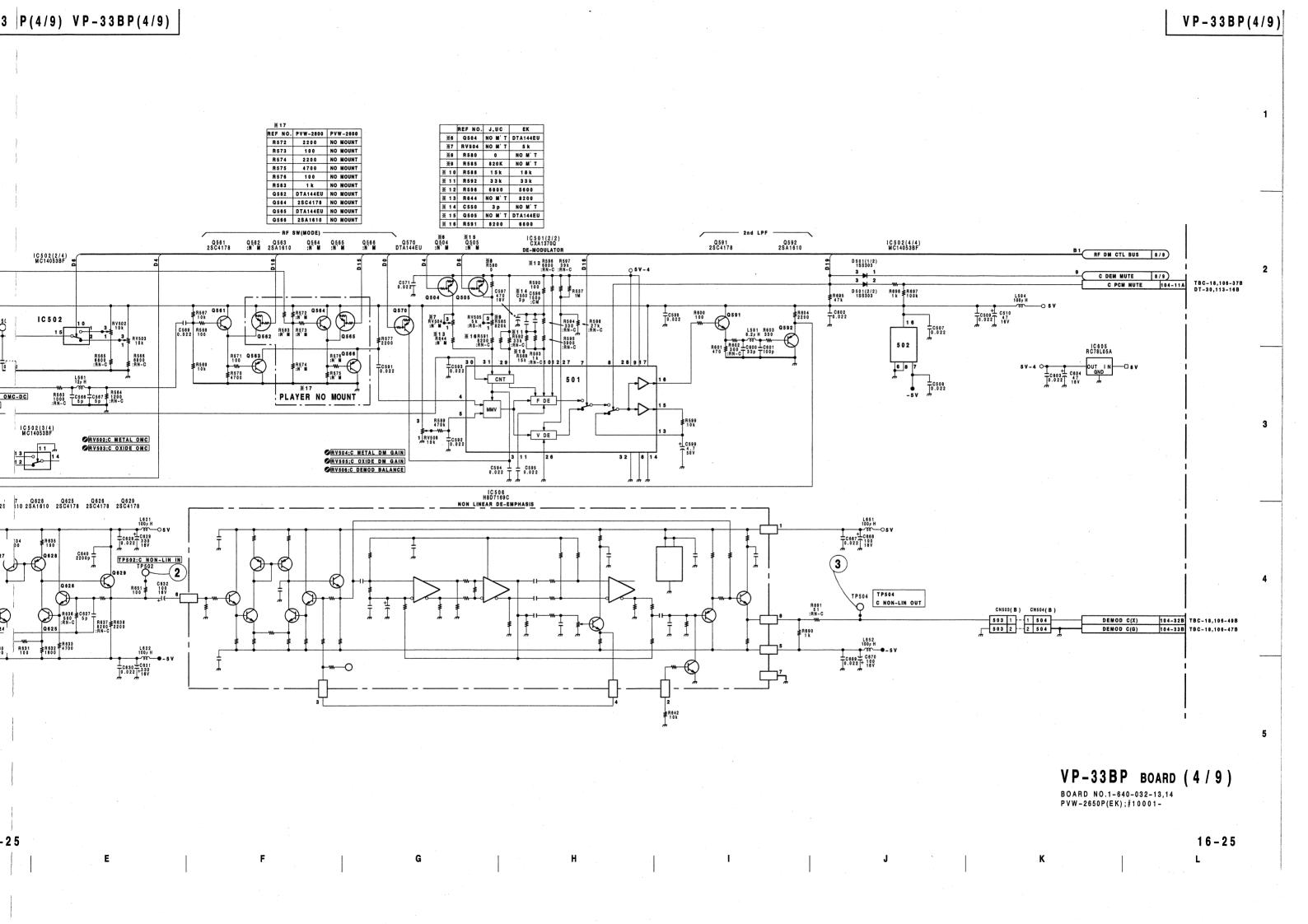
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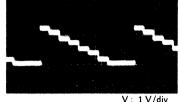
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#### VP-33BP (1-640-032-13,14)

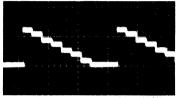
	(	
TP1 TP2 TP101 TP102 TP103 TP105 TP106 TP107 TP106 TP107 TP201 TP202 TP204 TP205 TP401 TP205 TP403 TP406 TP407 TP408 TP501 TP502 TP504 TP505 TP701 TP702 TP703 TP704 TP705 TP707 TP708 TP707 TP708 TP707 TP708 TP707 TP711 TP712 TP713 TP714 TP715 TP716	D-1 D-1 D-1 D-1 D-1 D-1 D-1 D-1 D-1 D-1	
TP717	L-1	

① TP 701 PB



V : 1 V/div H : 20 μs/div

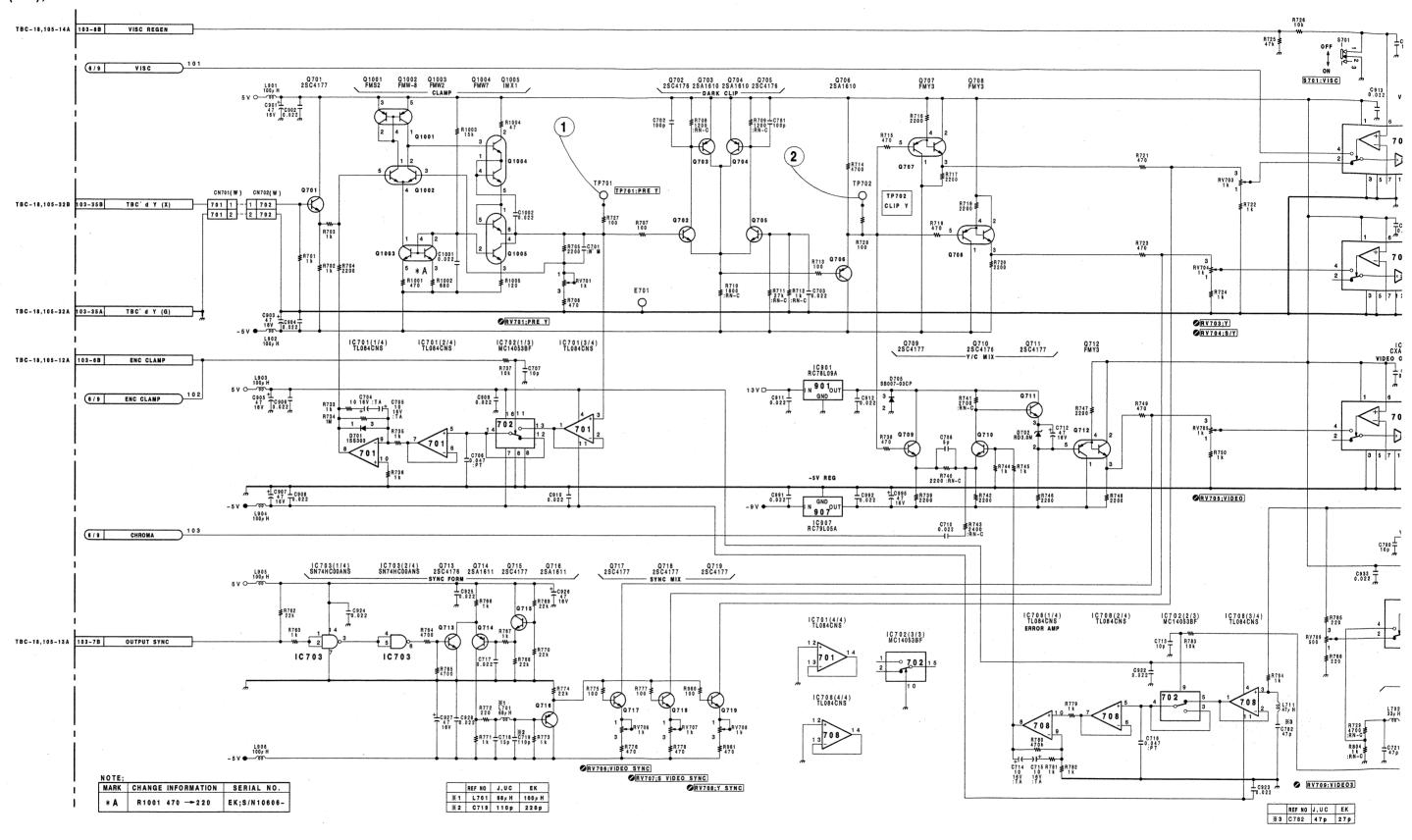
② TP 702 PB



V: 1 V/div

H : 20 μs/div

# VP-33BP(5/9); COMPOSITE OUT DRIVER



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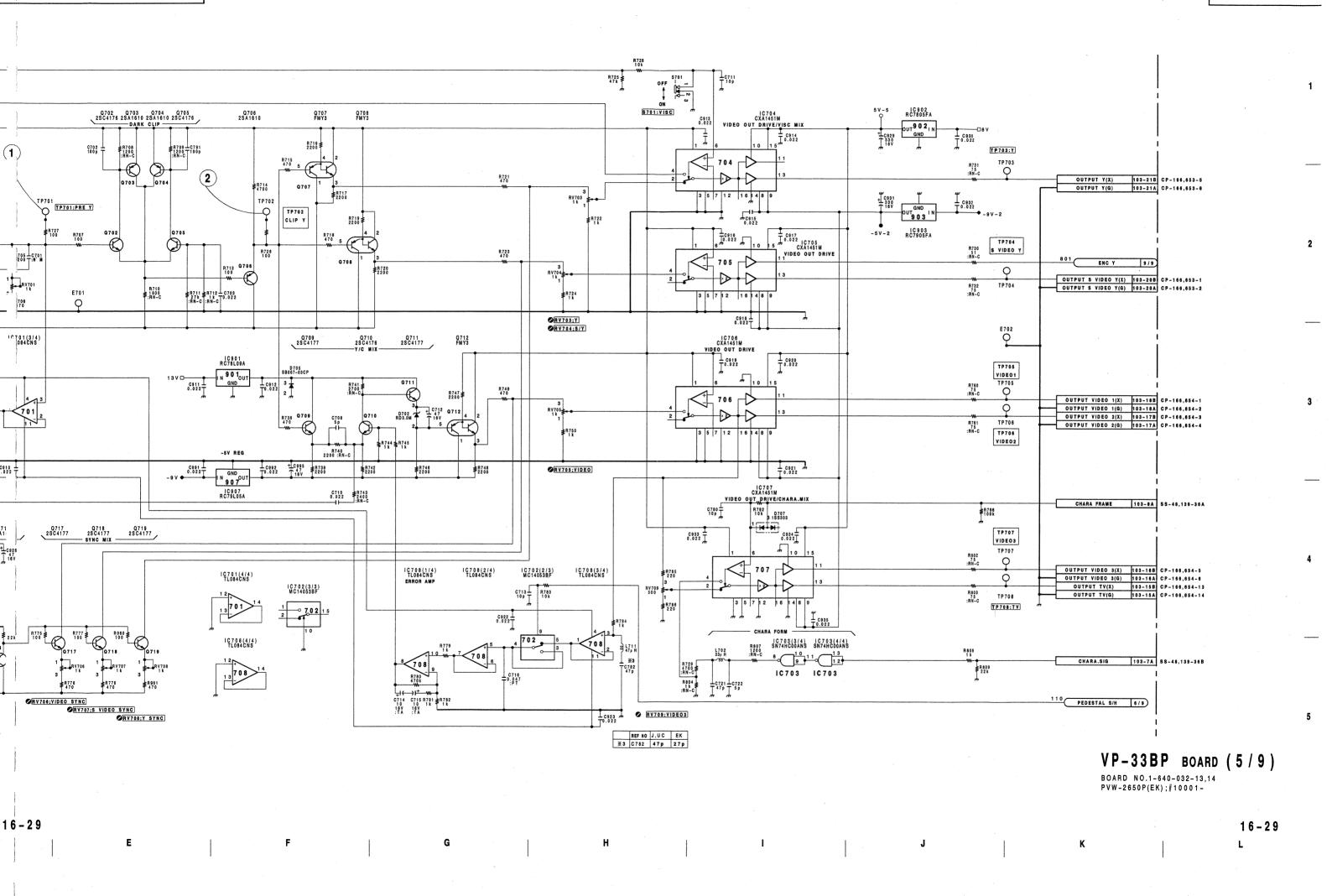
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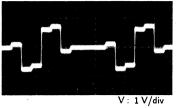


## VP-33BP (1-640-032-13,14)

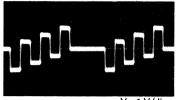
r-33DF	(1-040-032-13
TP1	D-1
TP2	F-1
TP101	D-1
TP102	C-1
TP103	D-1
TP105	C-4
TP106	B-4
TP107	A-4
TP108	D-6
TP201	B-4
TP202	D-1
TP204	C-1
TP205	C-3
TP401	F-1
TP402	F-1
TP403	F-1
TP406	F-4
TP407	F-4
TP408	H-6
TP501	G-4
TP502	H-1
TP504	H-2
TP505	G-3
TP701	N-3
TP702	N-4
TP703	M-6
TP704	N-6
TP705	N-6
TP706 TP707	N-6
TP707	P-6
TP708	P-6
TP709	K-6
TP710	J-6
TP711	M-6
TP712	M-4
TP713	M-6 K-4
TP714	
TP715 TP716	K-1 K-1
	L-1
TP717	L-1

① TP 709 PB

② TP 710 PB



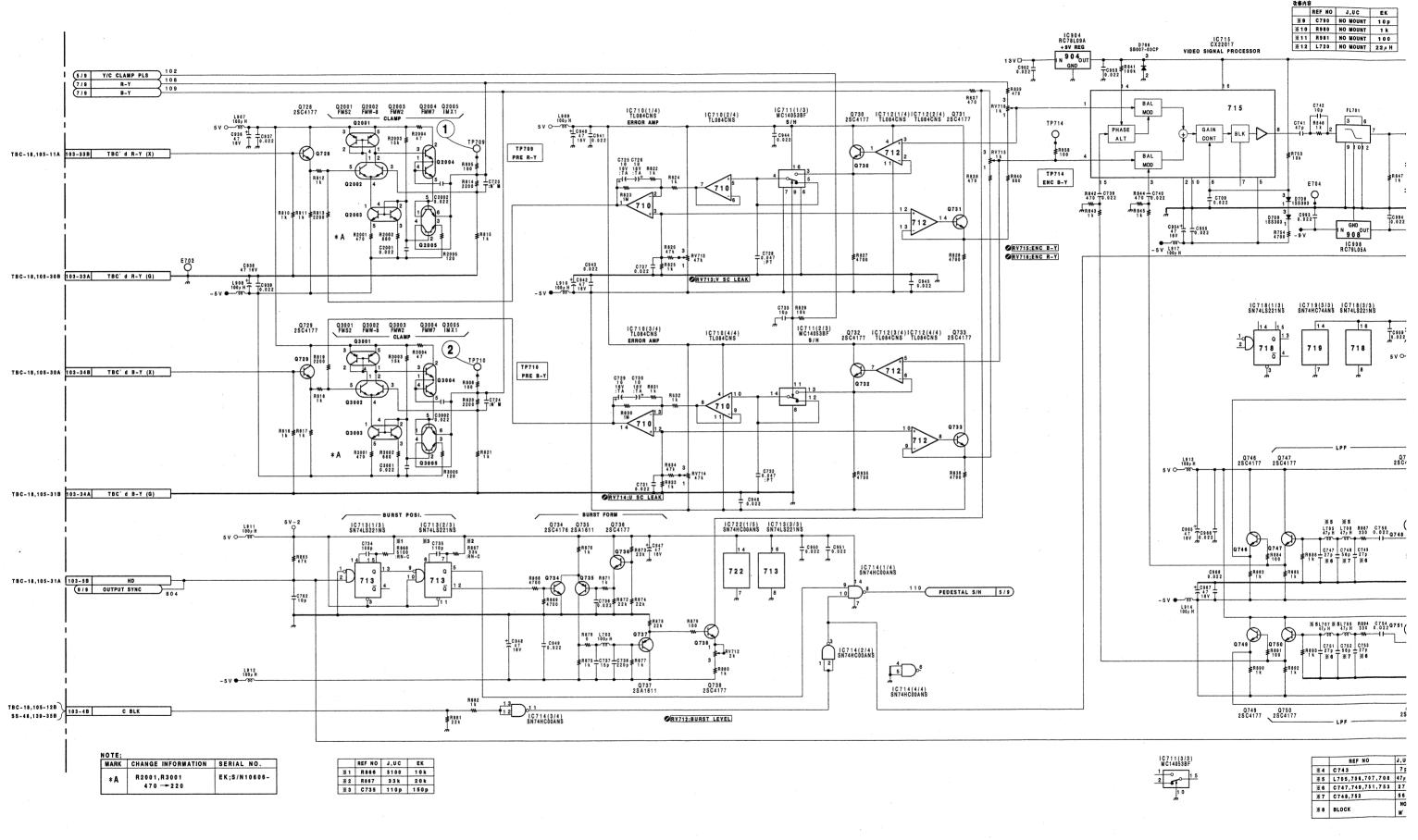
H: 20 μs/div



V: 1 V/div

H : 20 μs/div

# VP-33BP(6/9);ENCODER



16-33

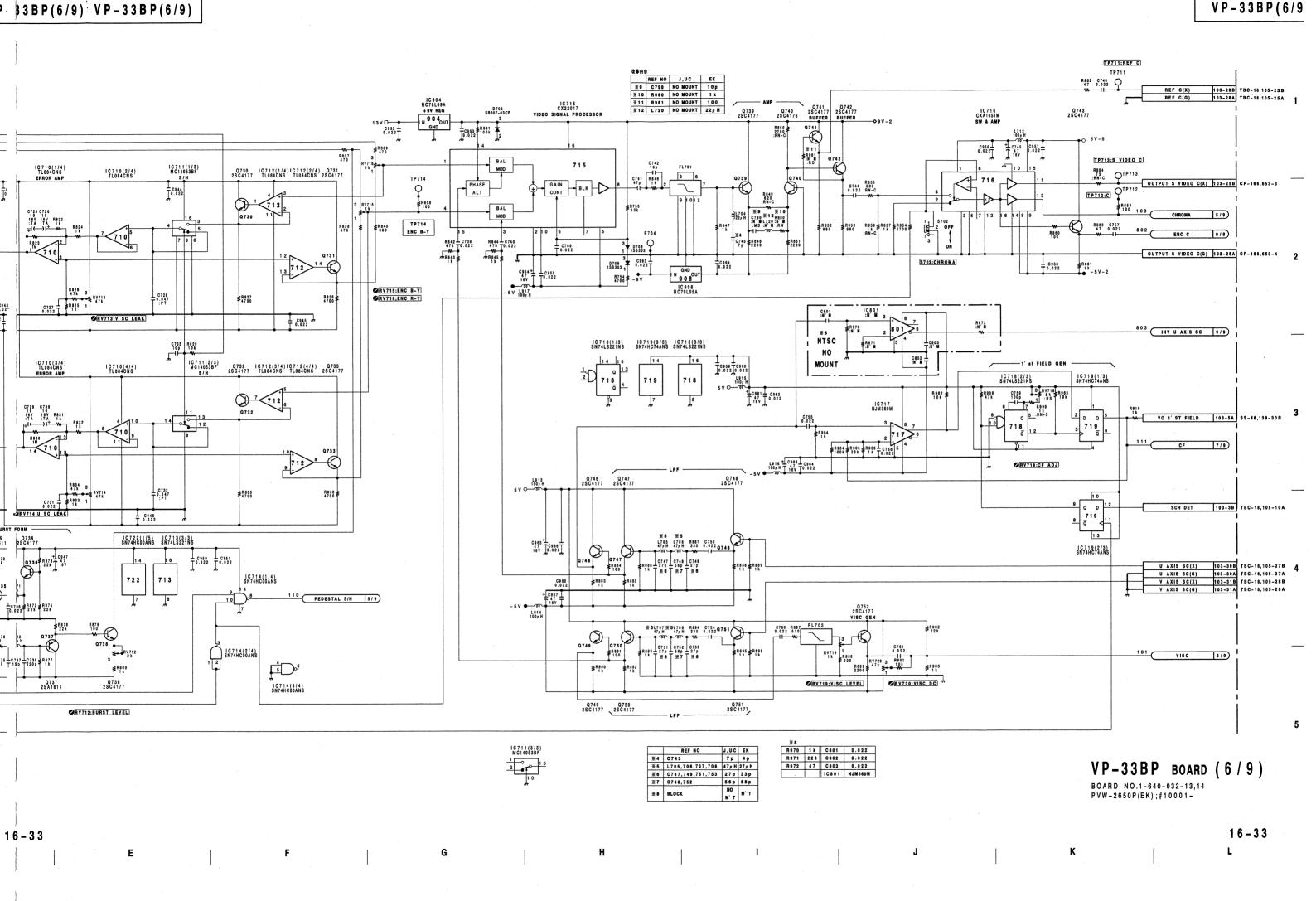
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#### VP-33BP (1-640-032-13,14)

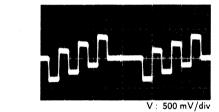
/P-33BP	(1-040-032-
TP1 TP2 TP101 TP102 TP103 TP105 TP106 TP107 TP108 TP201 TP202 TP204 TP205 TP401 TP402 TP403 TP408 TP501 TP502 TP504 TP502 TP504 TP502 TP701 TP702 TP703 TP704 TP705 TP705 TP701 TP705 TP706 TP707 TP708 TP707 TP708 TP707 TP708 TP710 TP711 TP712 TP711 TP711 TP711 TP711 TP7116 TP717	D-1 F-1 D-1 C-1 D-1 C-1 C-4 B-4 A-4 D-6 B-4 C-1 F-1 F-1 F-4 F-4 H-6 G-4 H-1 G-3 N-6 N-6 N-6 N-6 N-6 N-6 N-6 K-4 K-1 K-1 L-1

① TP 715 PB

② TP 716 РΒ

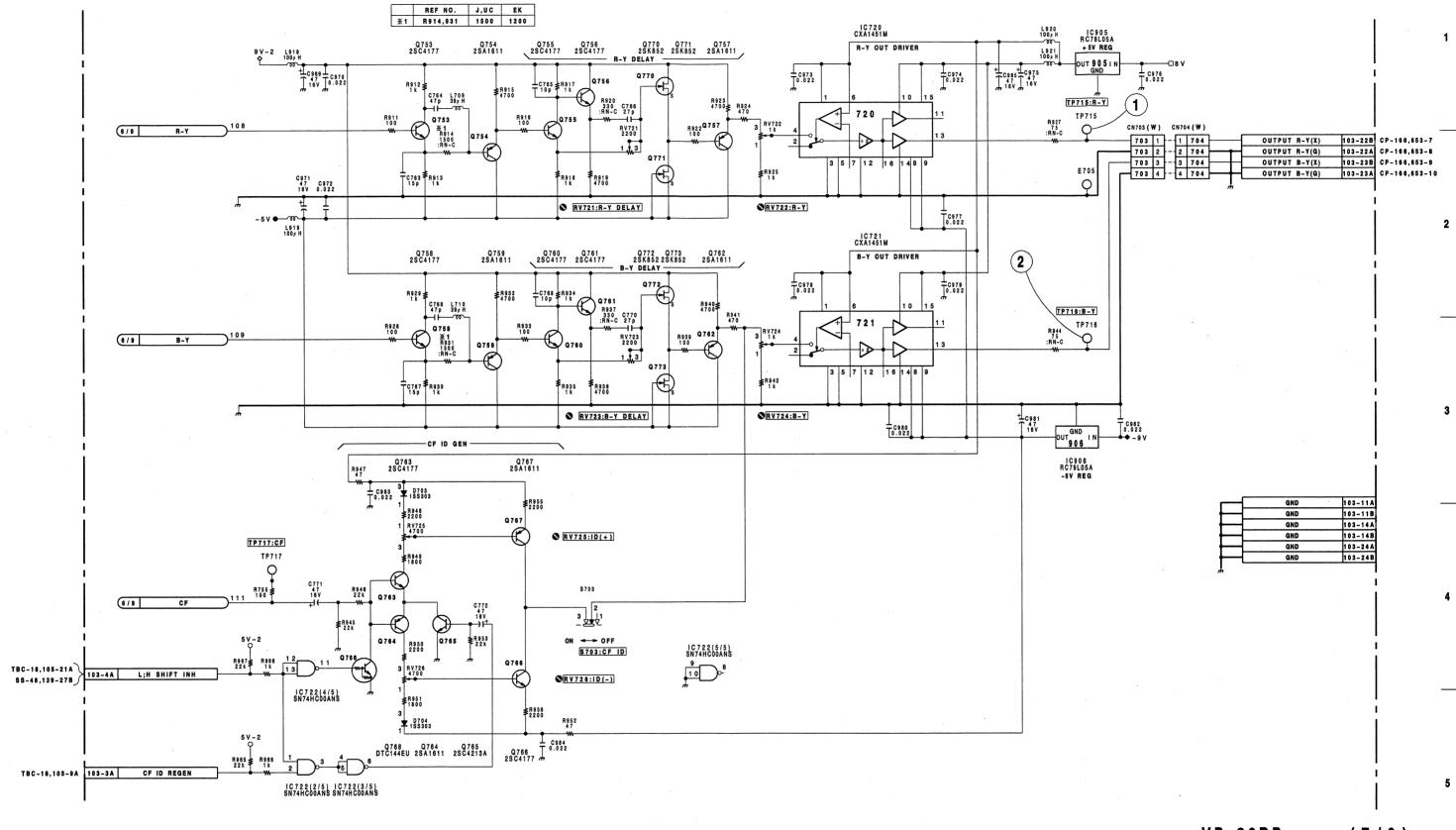


H : 20 μs/div



H : 20 μs/div





VP-33BP BOARD (7/9)

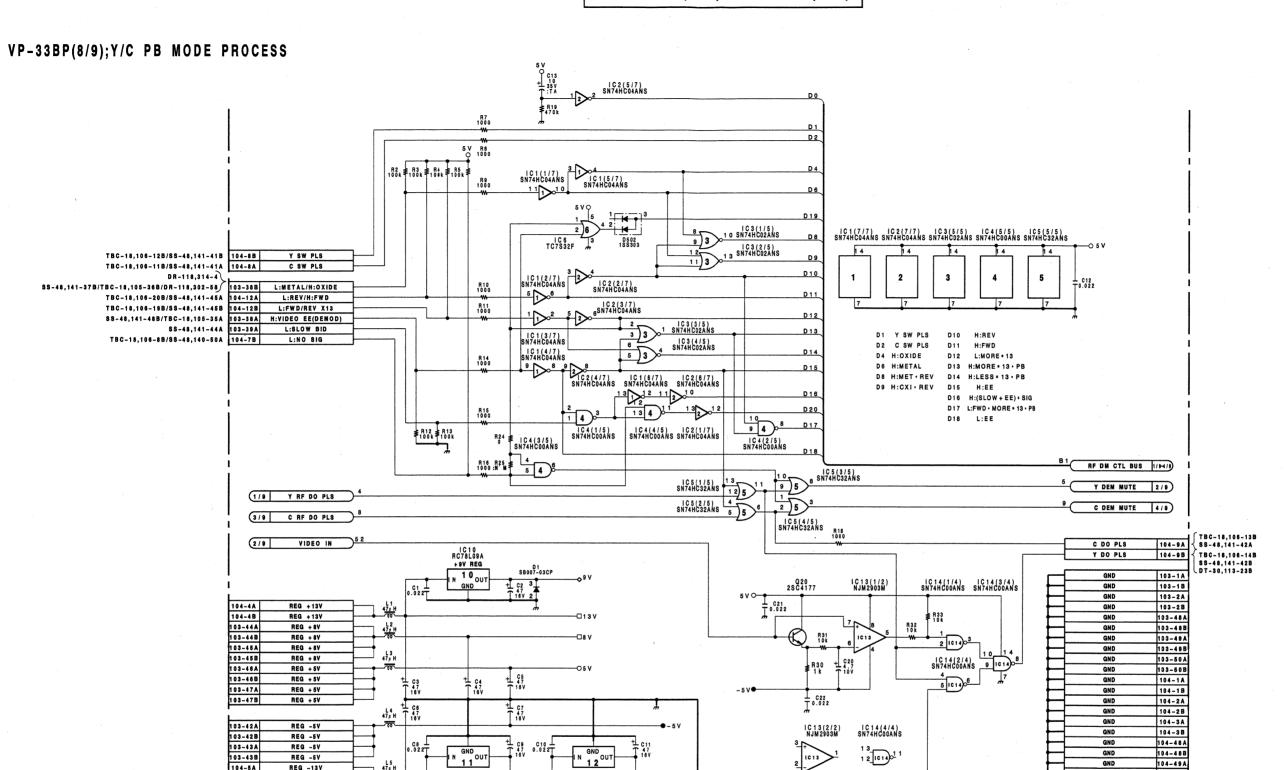
BOARD NO.1-640-032-13,14 PVW-2650P(EK);#10001-

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#### VP-33BP (1-640-032-13,14)

TP1 TP2 TP101 TP102 TP103 TP105 D-1 F-1 D-1 C-1 D-1 C-4 TP106 TP107 B-4 A-4 D-6 TP108 TP201 TP202 TP204 TP205 TP401 TP402 TP403 TP406 TP407 TP408 B-4 D-1 C-3 F-1 F-1 F-4 F-4 TP501 TP502 TP504 TP505 TP701 TP702 TP703 TP705 TP706 TP706 TP707 TP708 TP709 TP710 TP711 TP712 TP713 N-3 N-4 M-6 N-6 N-6 N-6 P-6 P-6 K-6 J-6 M-4 M-6 TP714 TP715 TP716 TP717 K-4 K-1 K-1 L-1



VP-33BP BOARD (8/9)

BOARD NO.1-640-032-13,14 PVW-2650P(EK); #10001-

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L;NOISELESS PB 1/8

104-5B

REG -5V

REG -13V

REG -13V

IC11 RC7909FA -9V REG

IC12 RC7909FA -9V REG

104-49A

104-49B

104-50A

#### VP-33BP (1-640-032-13,14)

TP1 D-1
TP2 F-1
TP101 D-1
TP102 C-1
TP103 D-1
TP105 C-4
TP106 B-4
TP107 A-4
TP108 D-6
TP201 B-4
TP202 D-1
TP204 C-1
TP205 C-3
TP401 F-1
TP402 F-1
TP403 F-1
TP403 F-1
TP406 F-4
TP501 G-4
TP501 G-4
TP501 G-4
TP501 G-4
TP502 H-1
TP504 H-2
TP505 G-3
TP701 N-3
TP701 N-3
TP702 N-4
TP703 M-6
TP704 N-6
TP705 N-6
TP706 N-6
TP707 P-6
TP708 P-6
TP709 K-6
TP709 K-6
TP710 J-6
TP711 M-6
TP711 M-6
TP712 M-4
TP713 M-6
TP714 K-1
TP715 K-1
TP716 K-1
TP716 K-1
TP717 L-1

# VP-33BP(9/9);U-DUB INTERFACE

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		I		
		<u> </u>		
5/9 ENC Y 801 ENC Y (X) 801-4		801-2 Y DUB (X)	OUTPUT U-DUB Y (X) 103-12B CP-166,68	
ENC Y (G) 801-3		801-1 Y DUB (G)	OUTPUT U-DUB Y (G) 103-12A CP-166,65	54-12
(6/9 ENC C )802 ENC C (X) 801-6		801-8 C DUB (X)	OUTPUT U-DUB C (X) 103-13B CP-166,69	54_0
ENC C (G) 801-5		801-7 C DUB (G)	OUTPUT U-DUB C (G) 103-13A CP-166,68	
#		#		
803		801-16 U-F PULSE	U FIELD PULSE 103-6A CP-166,69	54-7
6/9 INV U AXIS SC 801-18				
(5/9 OUTPUT SYNC 804 O SYNC 801-19		l .		
TBC-18,105-15A 103-9B L ALT LALT 801-14				
TBC-18,105-17A 103-10A VO FIELD O/E FIELD O/E 801-15				. 3
		1		
		I		
13V - +13V 801-11				<b>n</b>
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8 V - +8V 801-12		l		
5 V O +5V 801-13		!		
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-5 V ● -5 V 801-9			1	
				4
GND 801-10		l .		
GND 801-17 GND 801-20				
GND [801-20]	UI F-2			
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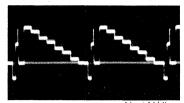
VP-33BP BOARD (9/9)
BOARD NO.1-640-032-13,14
PVW-2650P(EK);#10001-

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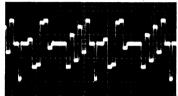
#### TBC-18P(1-640-033-13)

① TP 101 PB



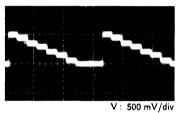
V : 1 V/div H : 20 μs/div





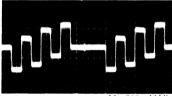
V : 1 V/div H : 20 μs/div





H:  $20 \mu s/div$ 

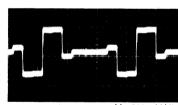




V : 500 mV/div

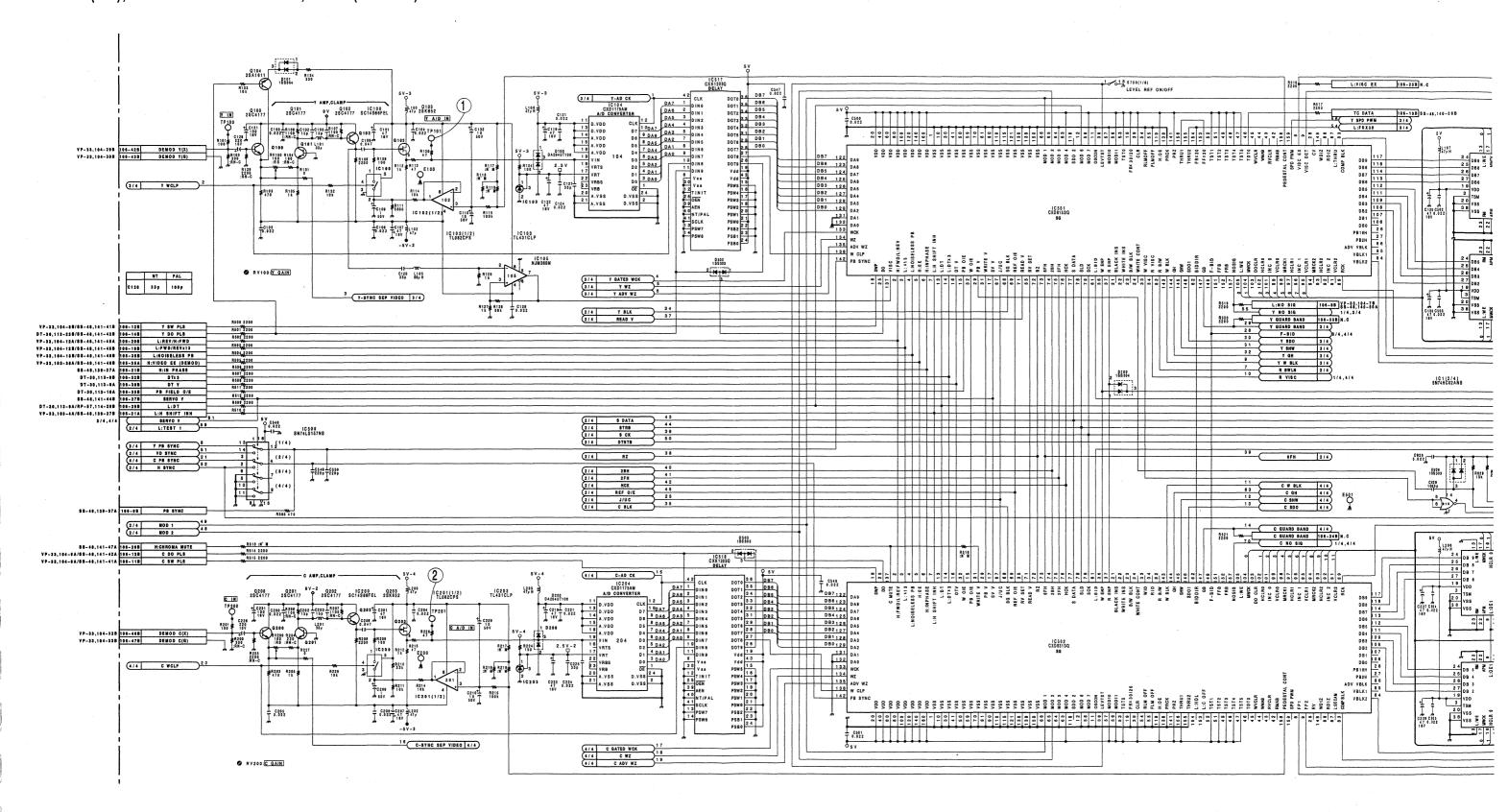
H : 20 μs/div





V : 500 mV/div H : 20 μs/div

# TBC-18P(1/4); TIME BASE CORRECTOR, CTDM(EXPAND)



16-49

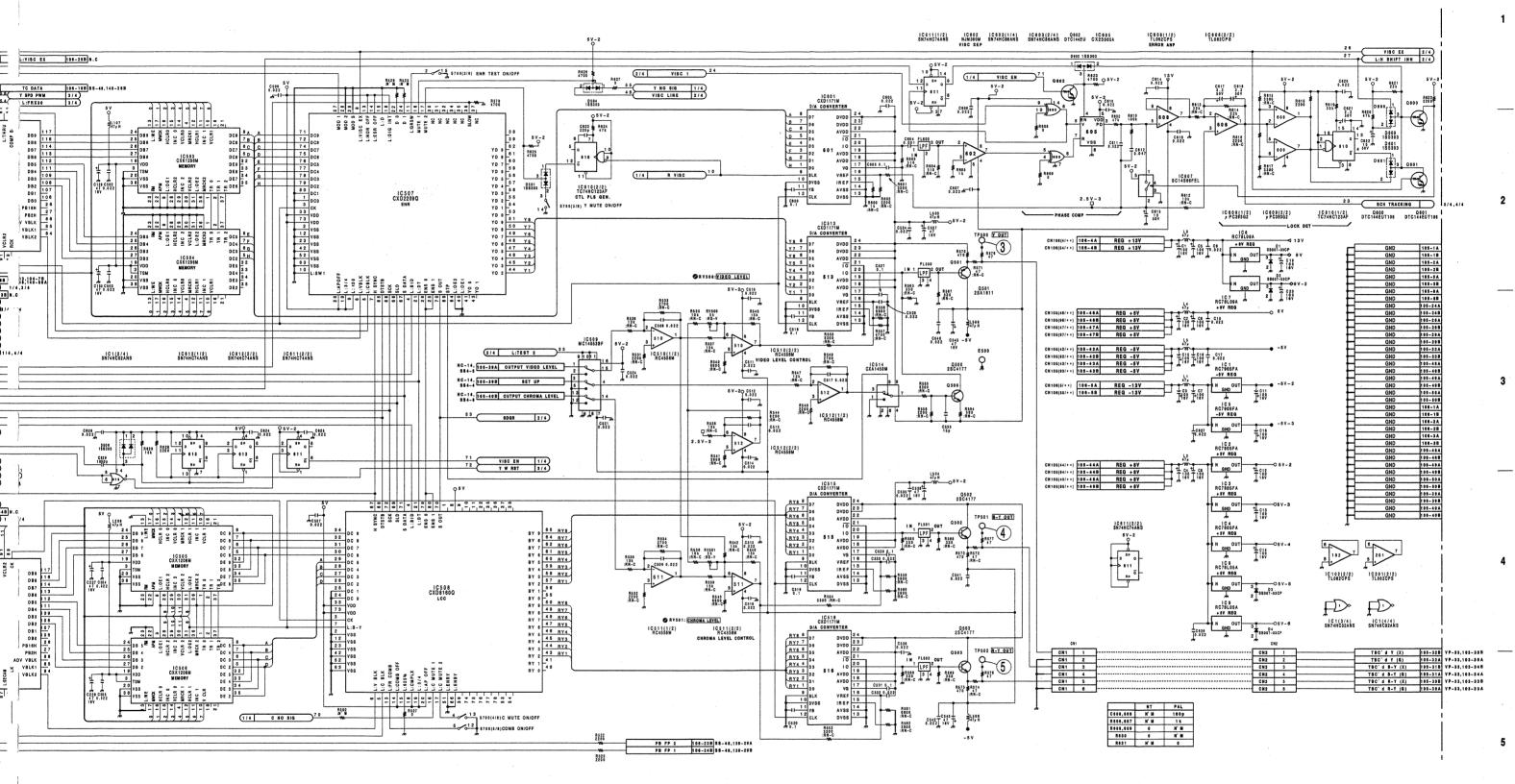
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TBC-18P BOARD (1/4)

BOARD NO.1-640-033-13 PVW-2650P(EK);#10001-

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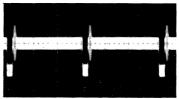
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#### TBC-18P(1-640-033-13)

TP101 TP200 TP201 TP300 TP301 TP302 TP303 TP304 TP400 TP401 TP402 TP403 TP500 TP501 TP502 TP700 TP701 TP702 TP703 TP704	A-4 C-4 A-4 B-4 A-3 B-1 C-2 D-1 B-7 B-7 B-7 L-1 N-7 N-4 N-5 P-5 M-6 N-7
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- ① TP 700
- ② TP 705 PB
- ③ TP 701 PB
- ④ TP 702 PB

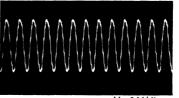


V : 500 mV/div H : 20 μs/div



V: 2 V/div

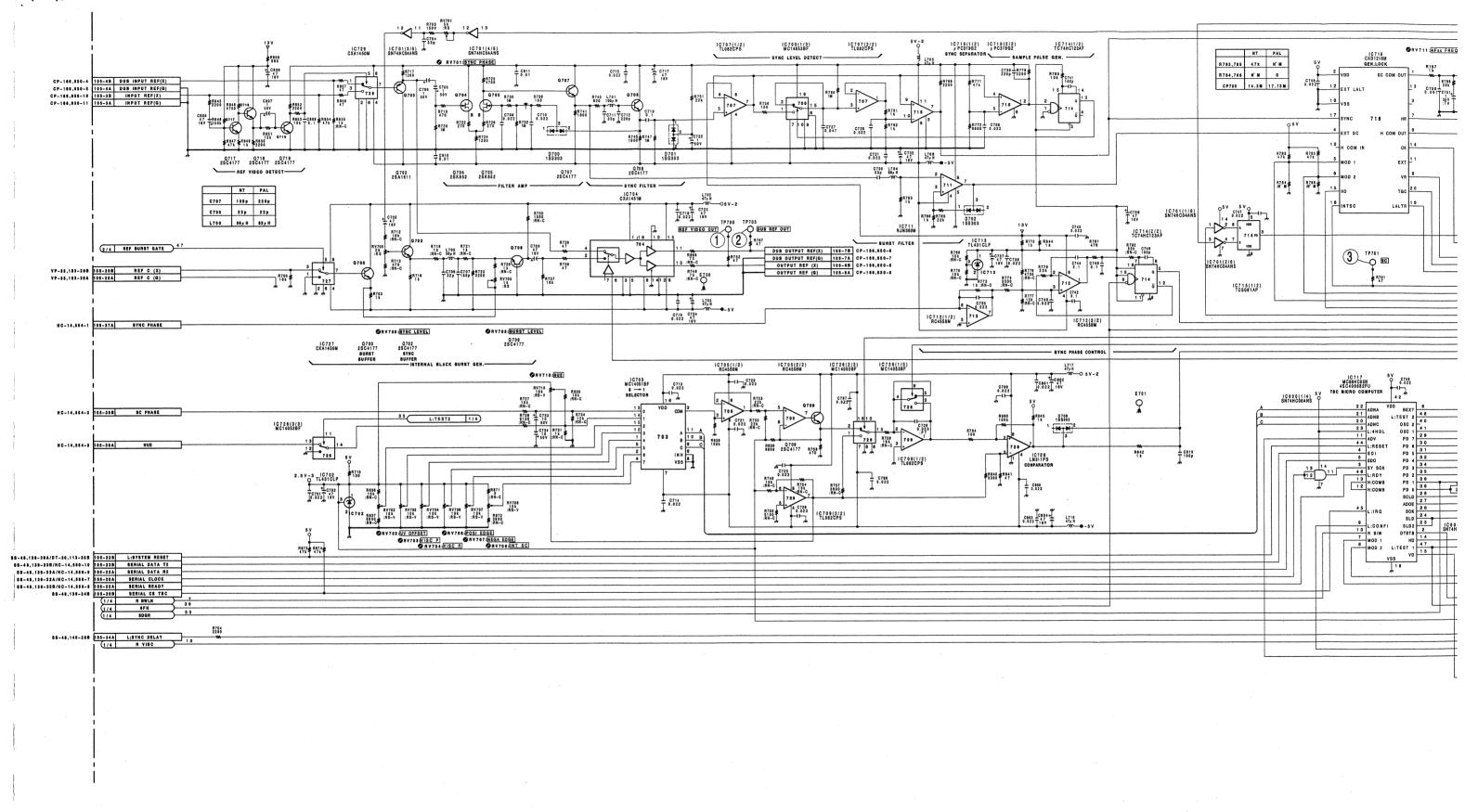
H: 100 ns/div



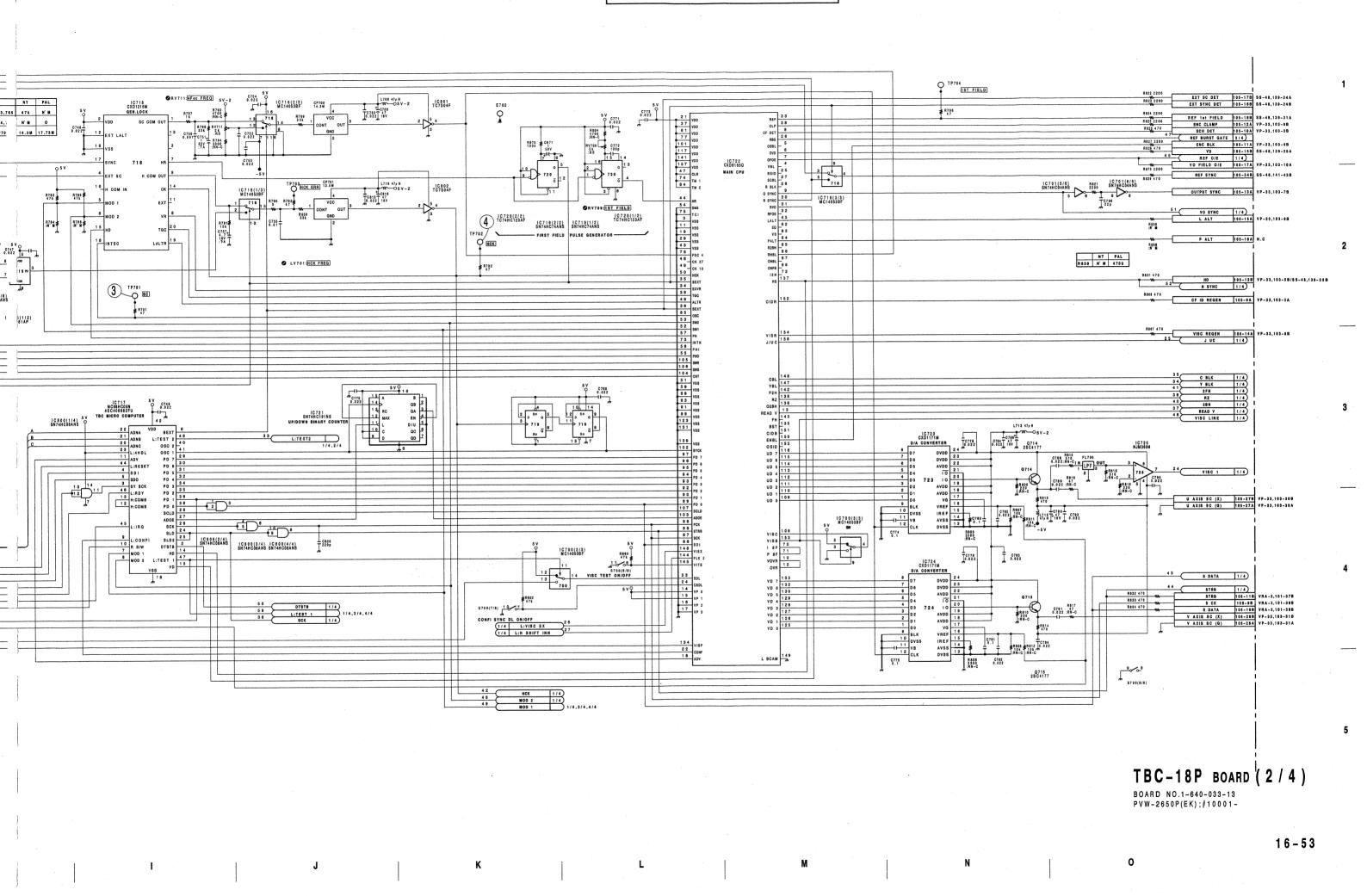
V: 2 V/div

H: 100 ns/div

#### - 8P(2/4); TIME BASE CORRECTOR



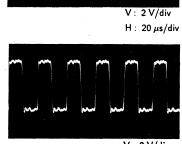
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## TBC-18P(1-640-033-13)

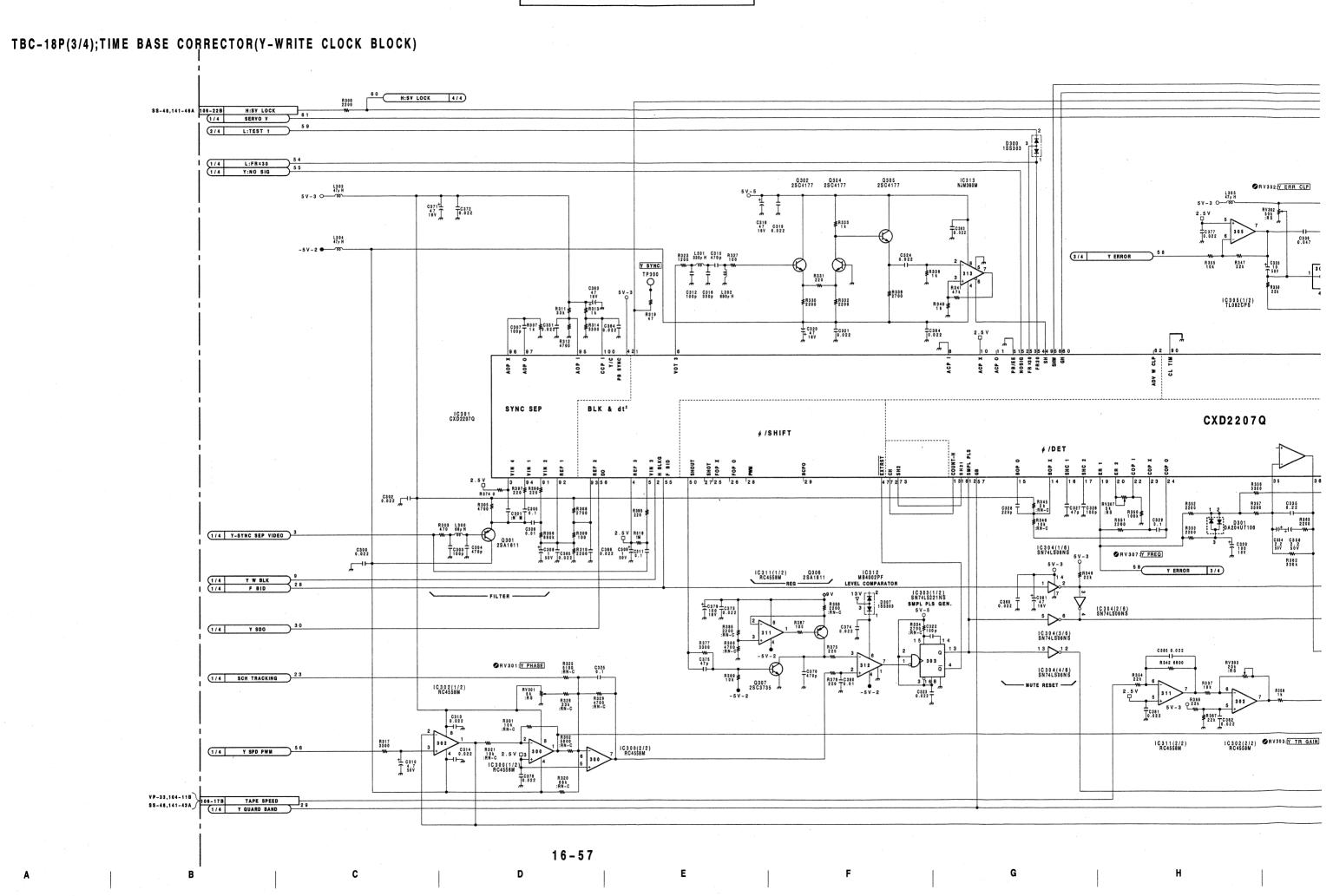
TP100	A-4
TP101	C-4
TP200	A-4
TP201	B-4
TP300	A-3
TP301	B-1
TP302	C-2
TP303	D-1
TP304	B-1
TP400	C-5
TP401	C-7
TP402	B-7
TP403	B-7
TP500	L-1
	-
TP502	M-1
TP700	N-7
TP701	N-4
TP702	N-5
TP703	P-5
TP704	M-6
TP704	N-7

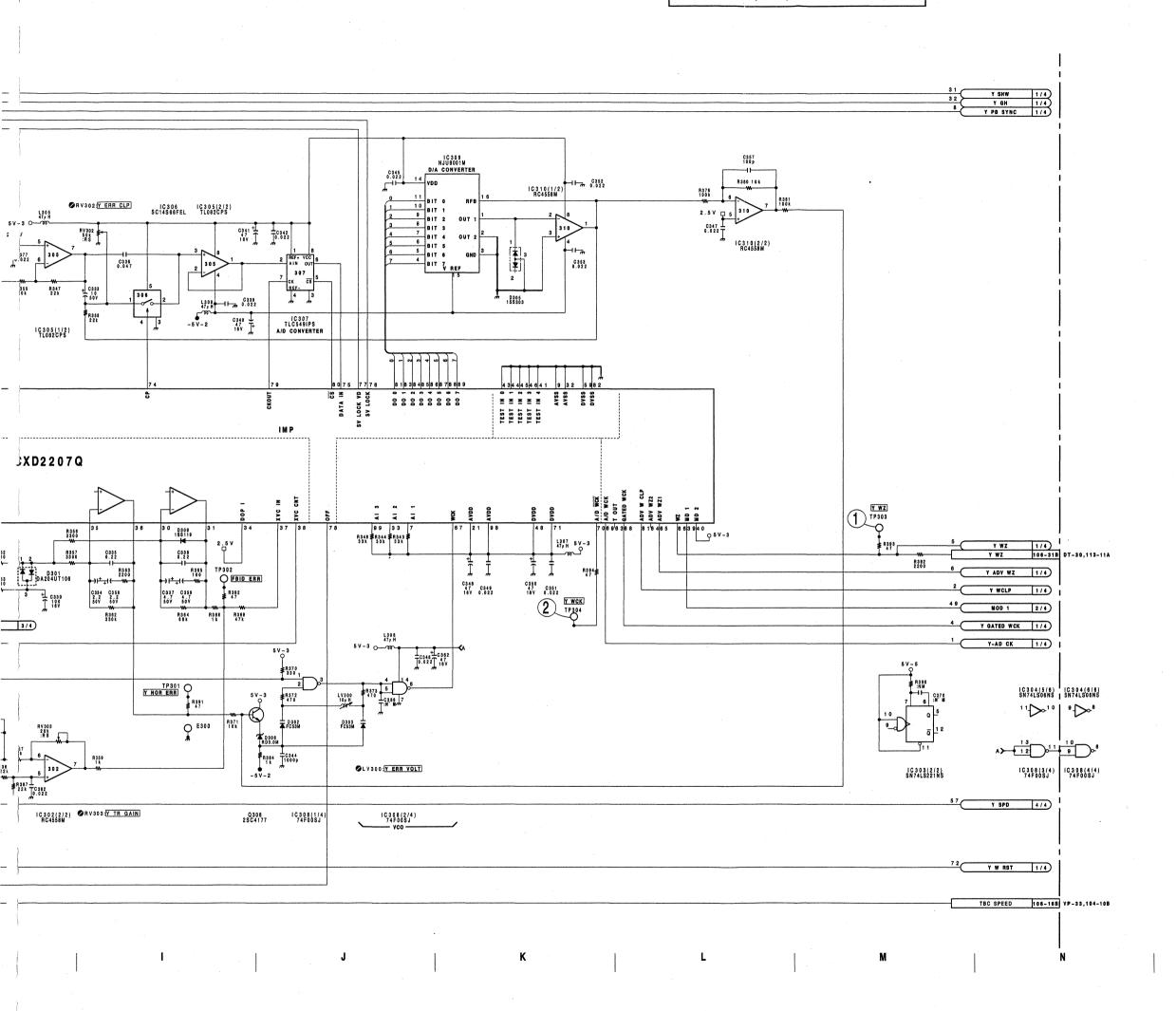




② TP 304 PB

> V: 2 V/div H: 50 ns/div





TBC-18P BOARD (3/4)

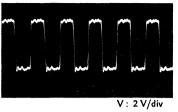
BOARD NO.1-640-033-13 PVW-2650P(EK);#10001-

16-57

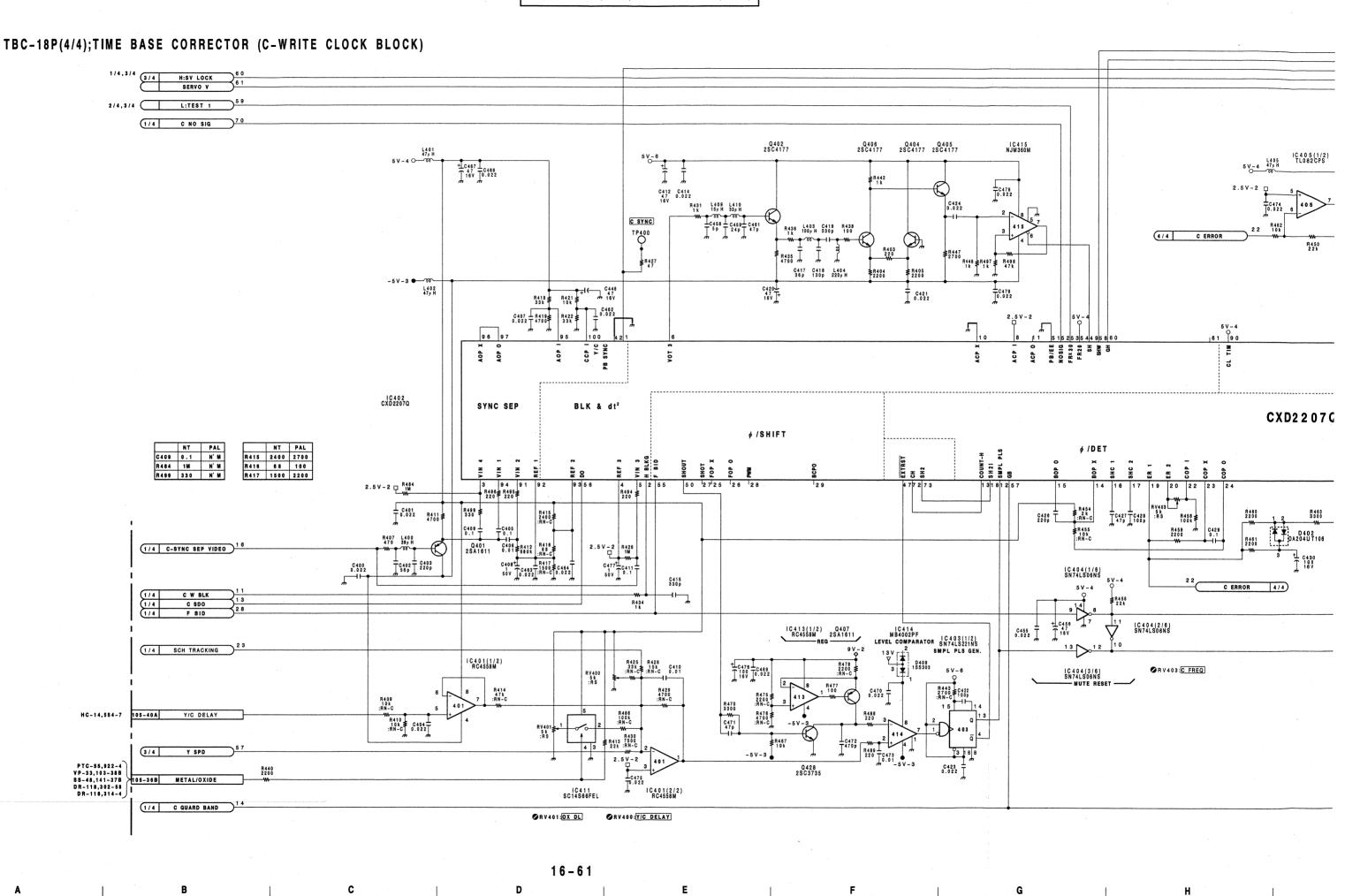
## TBC-18P(1-640-033-13)

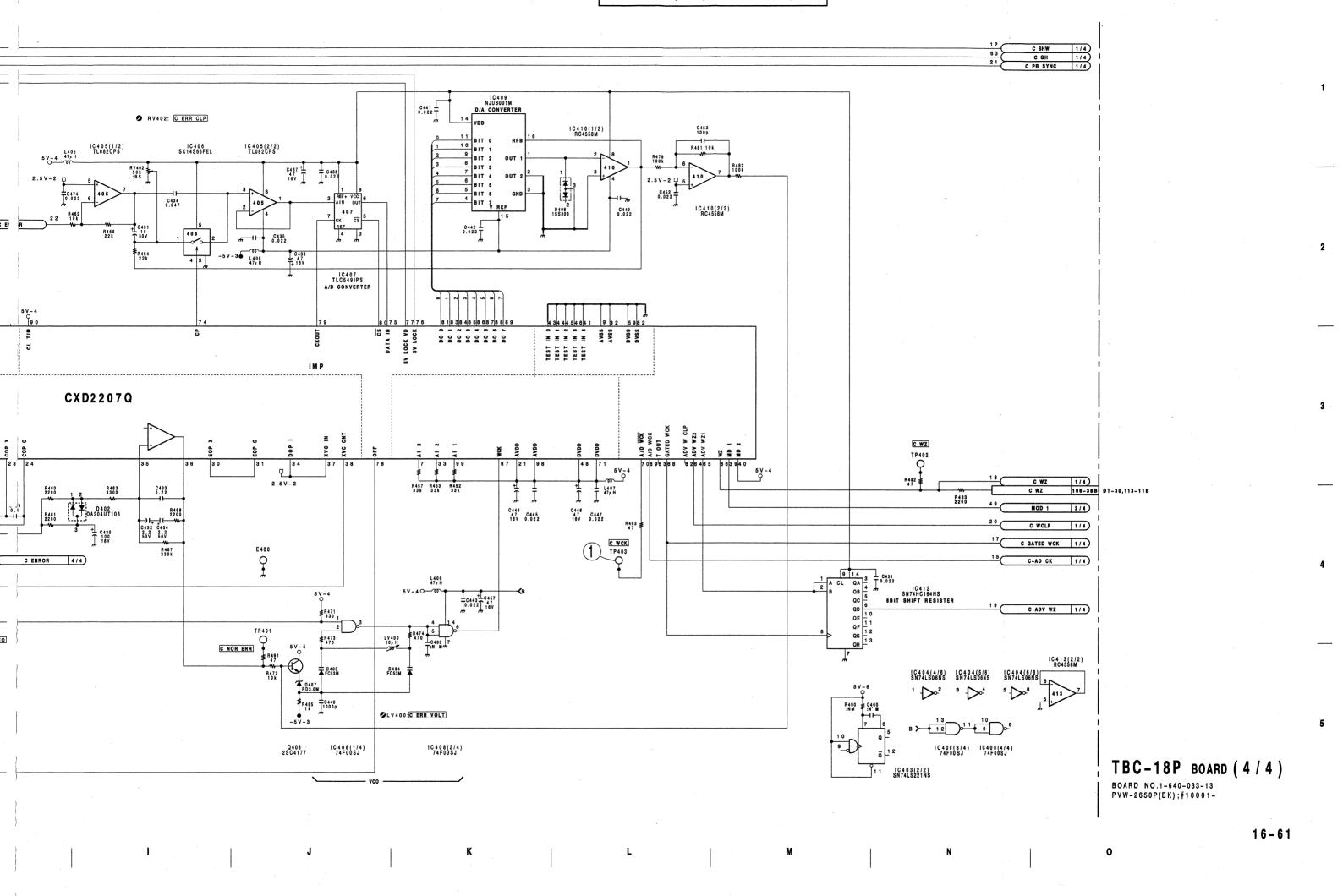
TP100	A-4
TP101	C-4
TP200	A-4
TP201	B-4
TP300	A-3
TP301	B-1
TP302	C-2
TP303	D-1
TP304	B-1
TP400	C-5
TP401	C-7
TP402	B-7
TP403	B-7
TP500	L-1
TP501	L-1
TP502	M-1
TP700	N-7
TP701	N-4
TP702	N-5
TP703	P-5
TP704	M-6
TP705	N-7
1 - 703	14-1

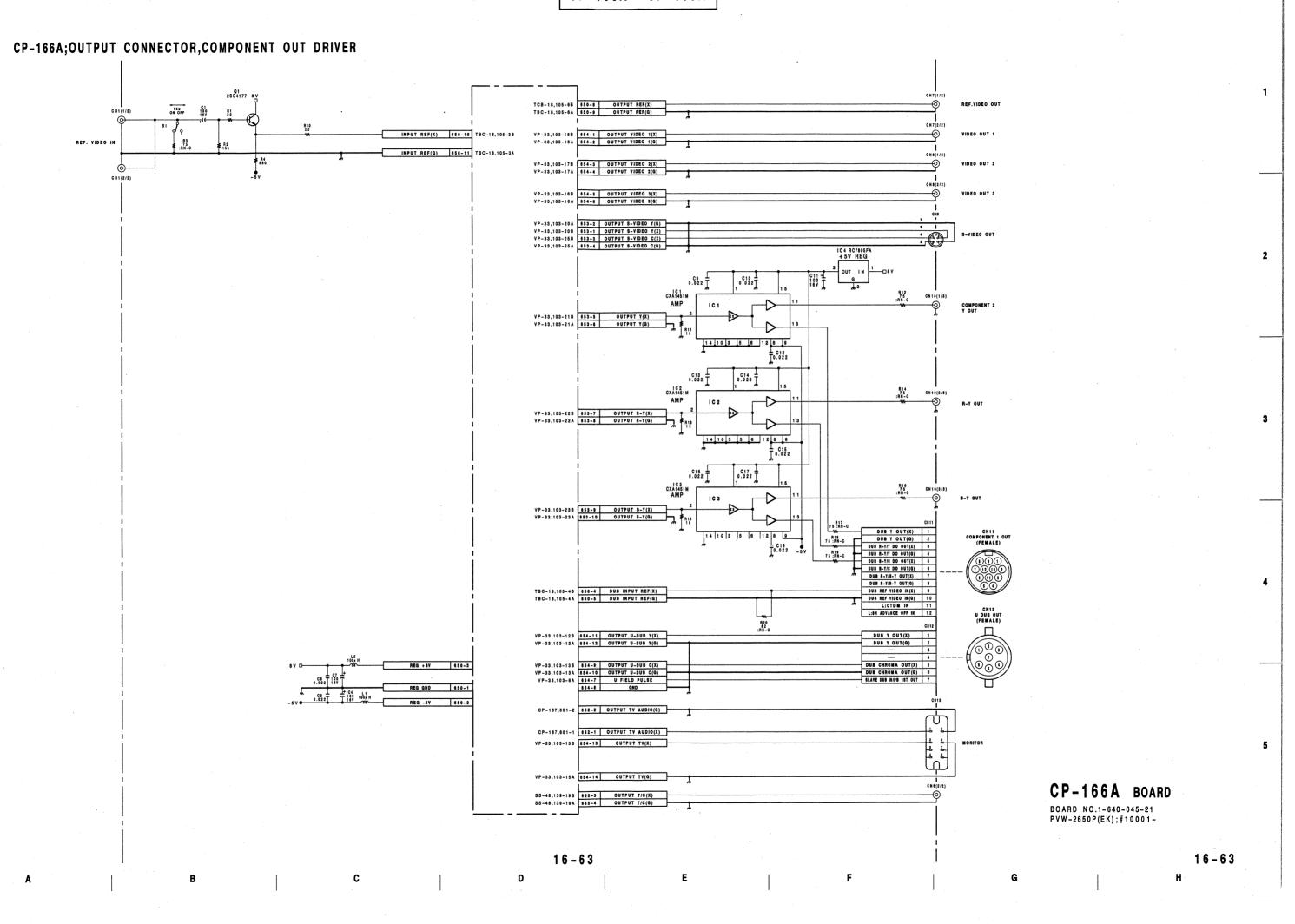
① TP 403 PB



H: 50 ns/div



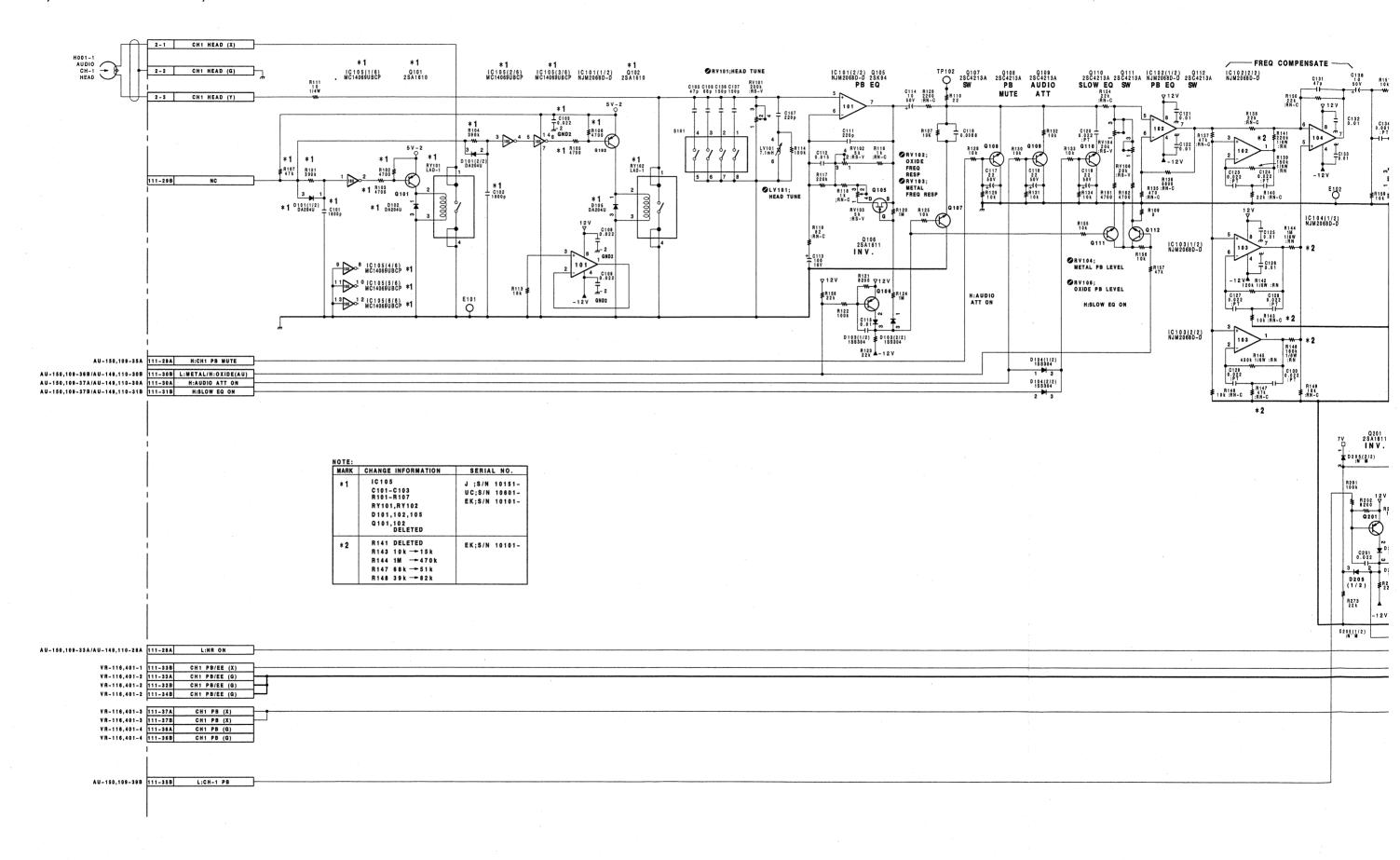




## AU-148AP(1-640-035-22)

TP102 A-1
TP103 E-3
TP104 C-2
TP105 C-2
TP201 E-3
TP202 C-6
TP301 E-4

#### AU-148AP:AUDIO CH-1 PROCESS.DOLBY SYSTEM



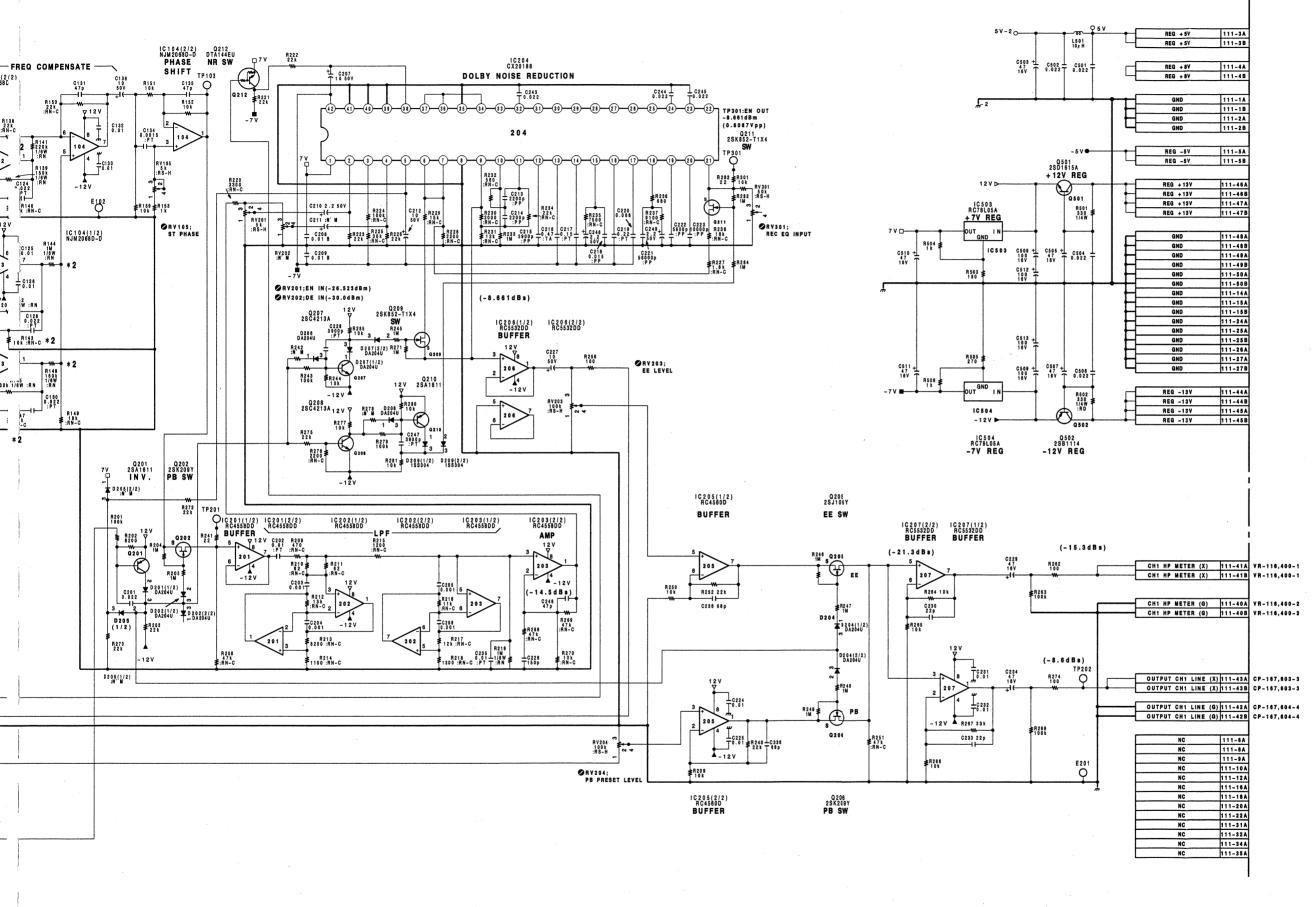
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AU-148AP BOARD

BOARD NO.1-640-035-22 PVW-2650P(EK);#10001-

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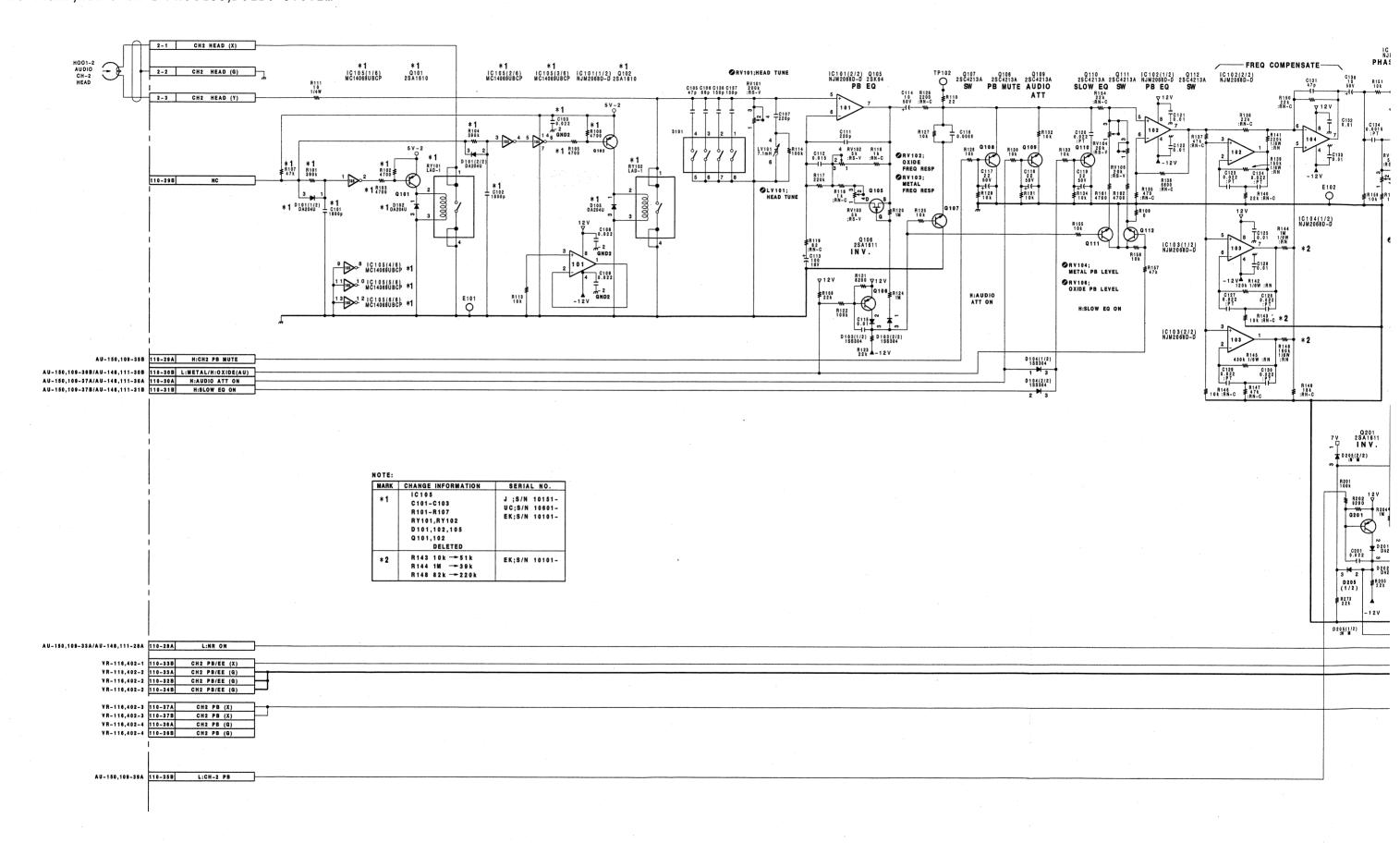
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# AU-149AP(1-640-036-22)

TP102	A-1
TP103	E-3
TP104	C-2
TP105	C-2
TP201	E-3
TP202	C-6
TP301	E-4

#### AU-149AP; AUDIO CH-2 PROCESS. DOLBY SYSTEM



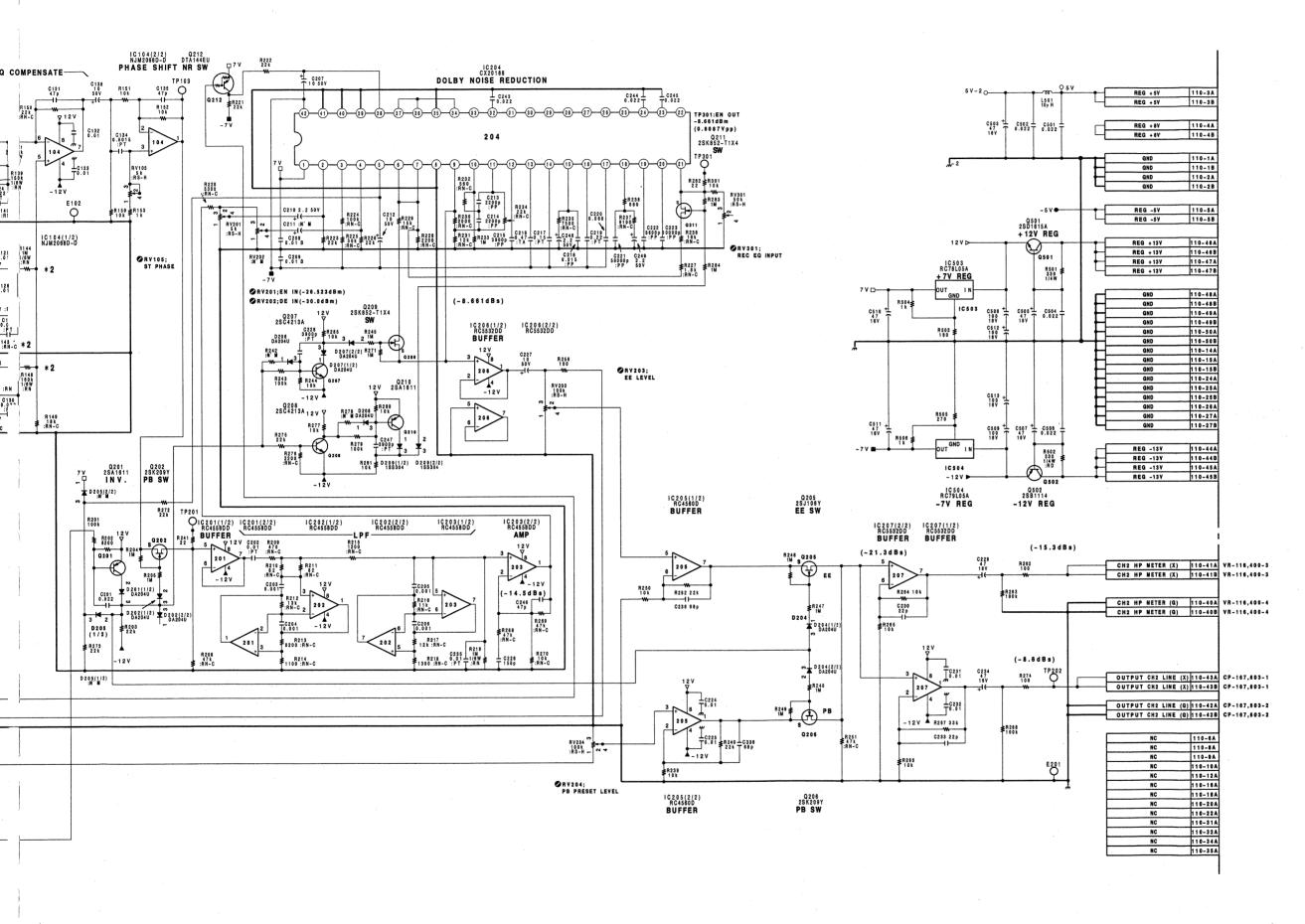
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AU-149AP BOARD

BOARD NO.1-640-035-22 PVW-2650P(EK);#10001-

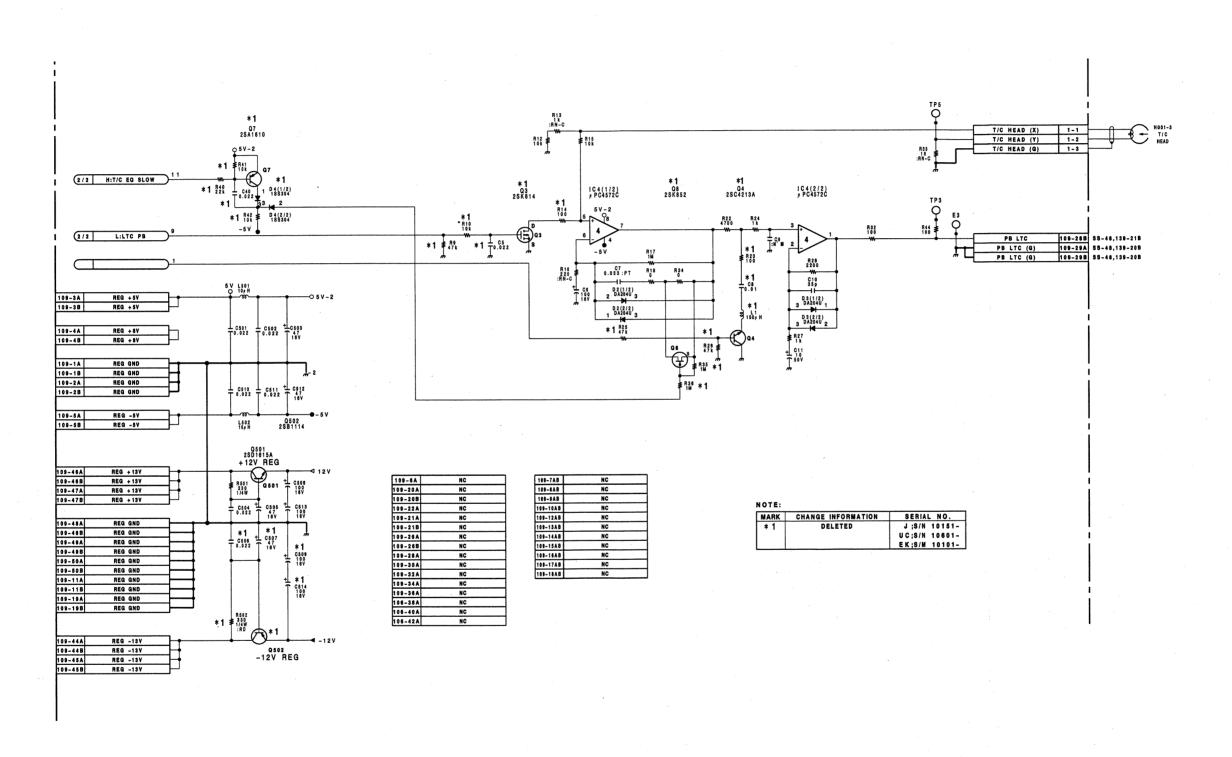
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AU-150A(1-640-037-22)

TP3 B-3 TP5 B-2



# AU-150A BOARD (1/2)

BOARD NO.1-640-037-22 PVW-2650P(EK);#10001-

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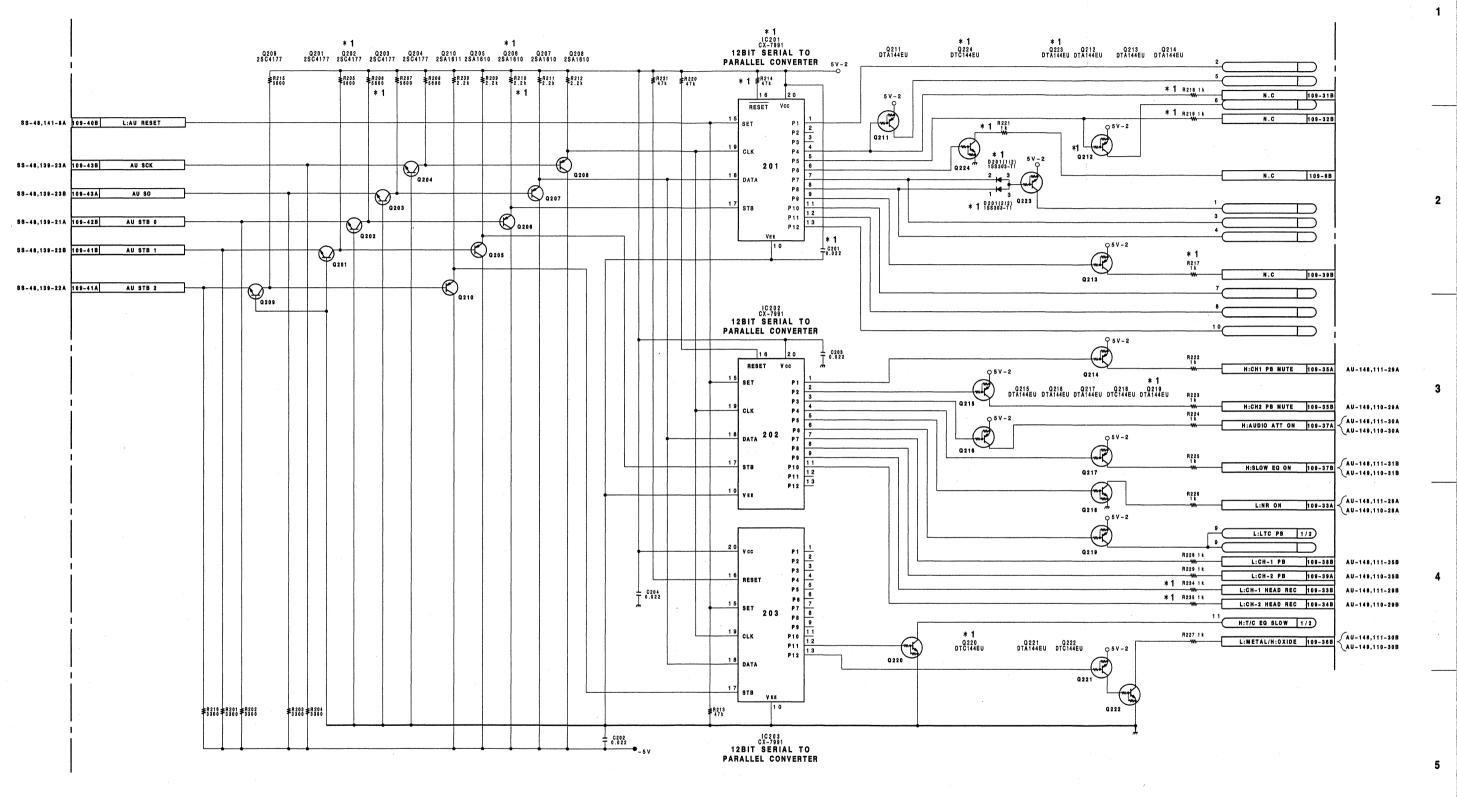
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AU-150A(1-640-037-22)

TP3 B-3 TP5 B-2

# AU-150A(2/2); MODE CONTROL



AU-150A BOARD (2/2)

BOARD NO.1-640-037-22 PVW-2650P(EK);#10001-

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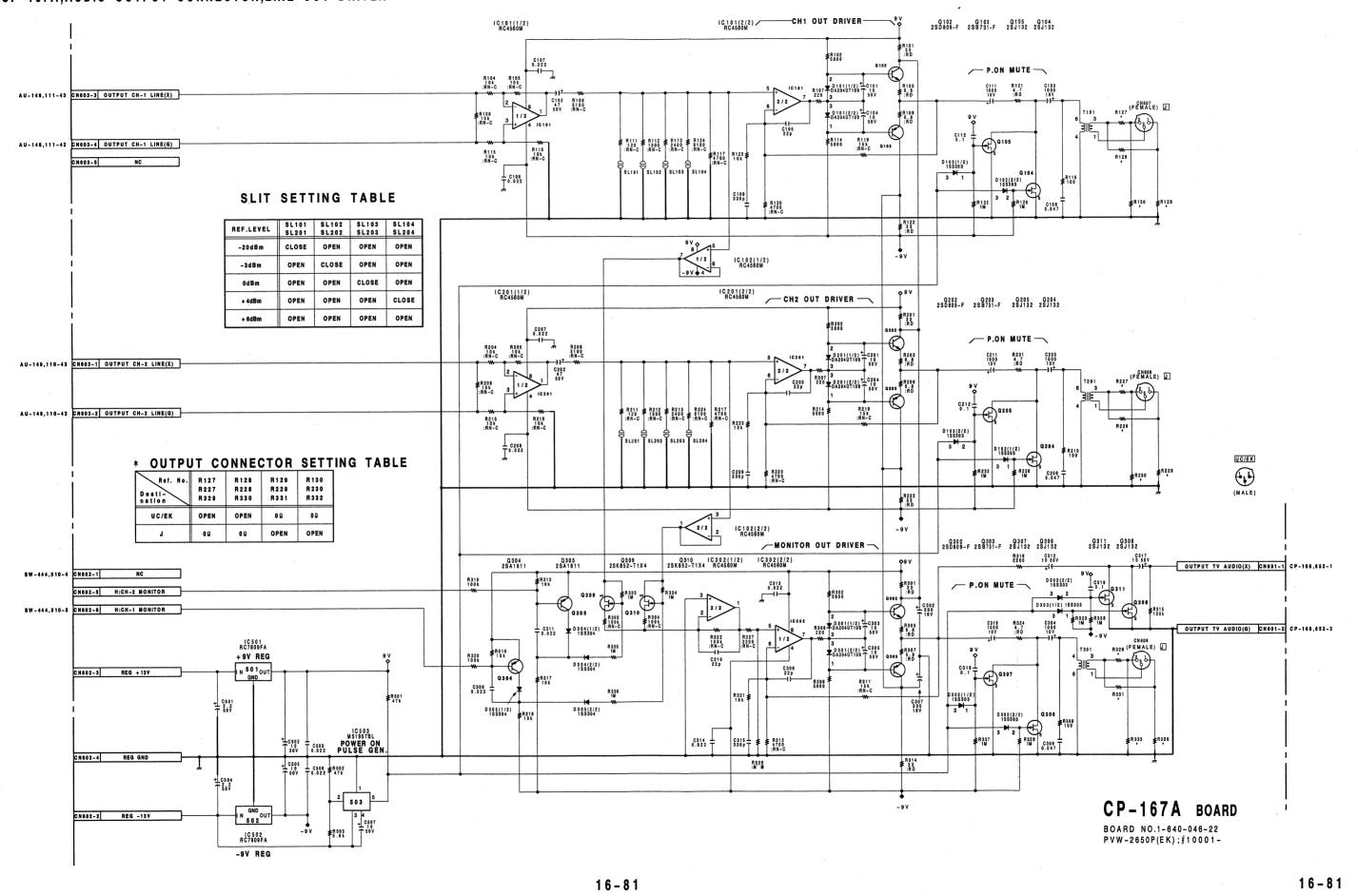
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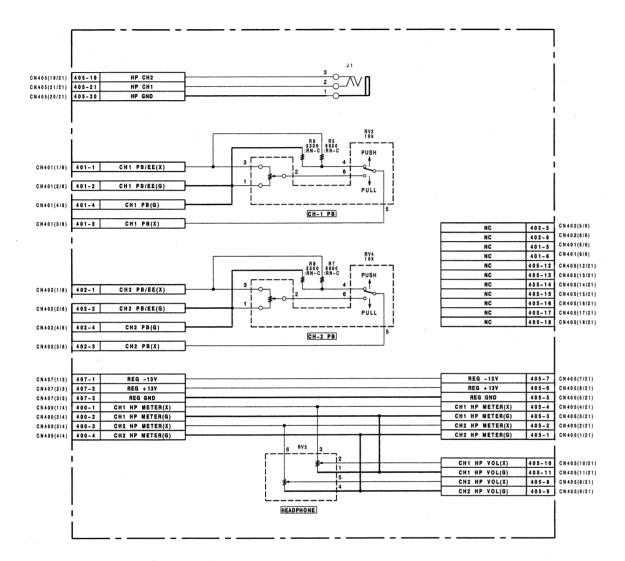
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#### CP-167A:AUDIO OUTPUT CONNECTOR.LINE OUT DRIVER



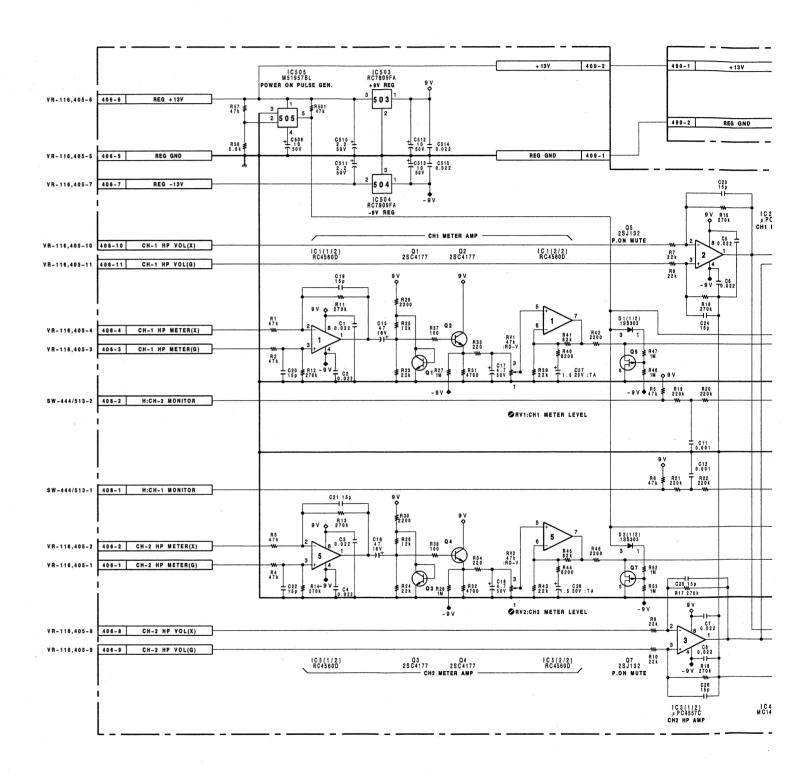
# VR-116B; AUDIO PB LEVEL CONTROL, HEADPHONE VOLUME CONTROL



VR-116B BOARD

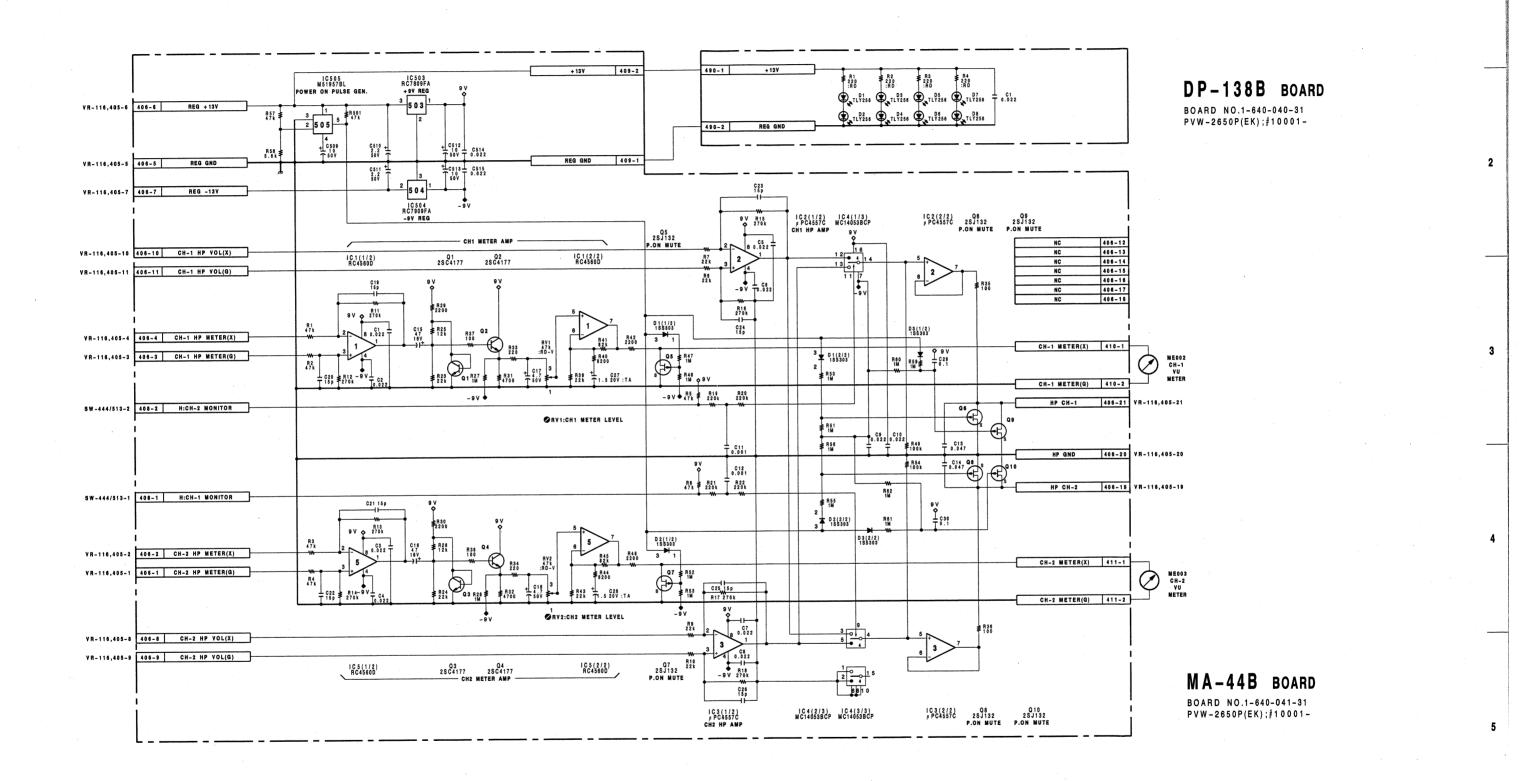
BOARD NO.1-640-039-31 PVW-2650P(EK); #10001-

# MA-44B; AUDIO METER DRIVER, HEADPHONE AMPLIFIER DP-138B; AUDIO LEVEL METER BACK LIGHT



16-83

# MA-44B;AUDIO METER DRIVER,HEADPHONE AMPLIFIER DP-138B;AUDIO LEVEL METER BACK LIGHT



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CN402(8/8) CN401(5/8)

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"N 405(17/21)

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CN405(4/21)

N 405(2/21)

10 CN405(10/21)

N 405(8/21) N 405(9/21)

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#### SS-48P(1-640-029-12)

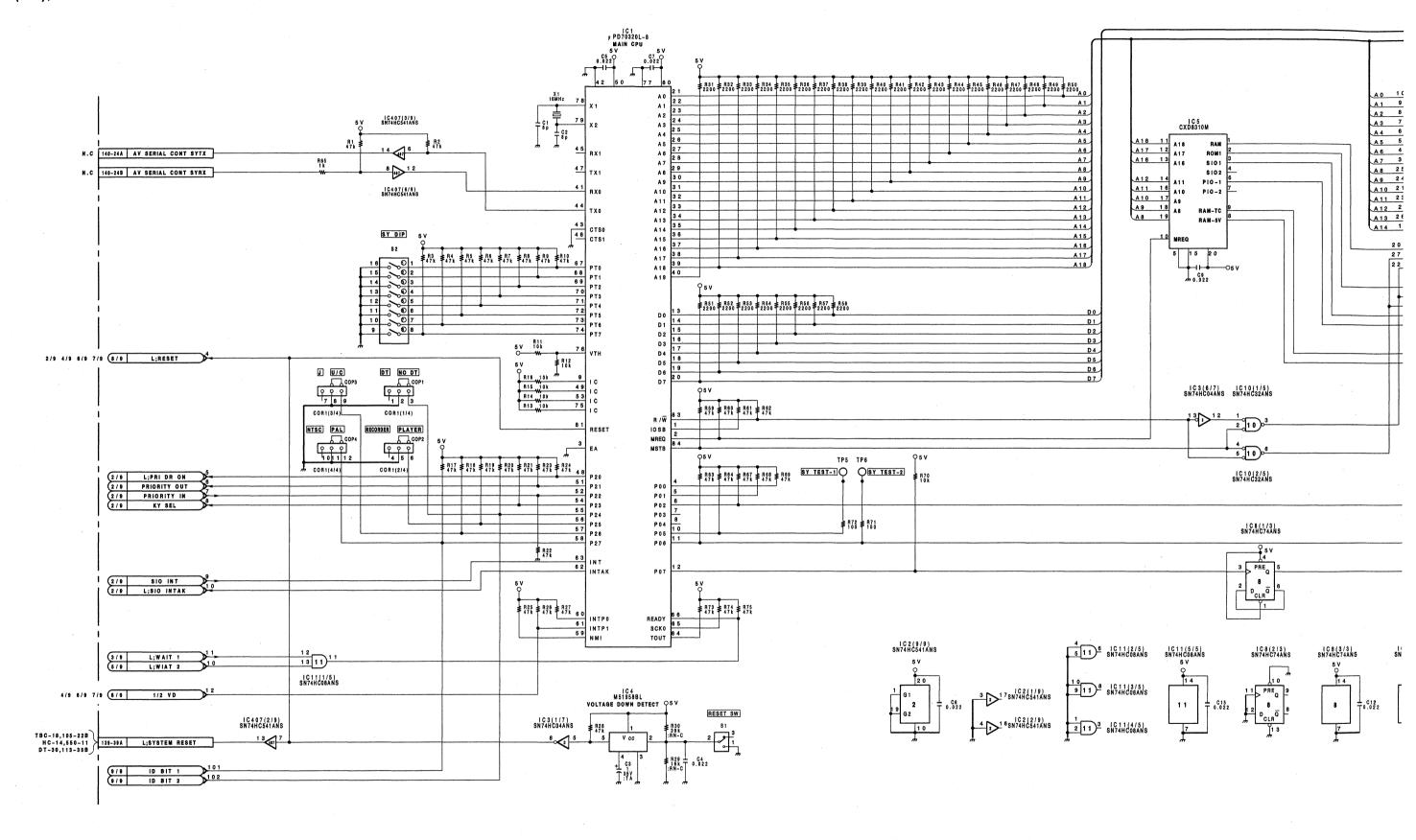
TP5 P-2 P-2 L-6 K-5 L-7 L-7 TP6 TP101 TP102 TP103 TP104 TP105 TP401 TP402 TP403 TP404 TP408 TP501 TP502 J-6 N-2 K-4 Q-7 J-1 G-3 F-2 TP503 TP504 F-4 G-3 G-3 J-4 G-1 G-4 K-3 TP505 TP506 TP507 TP507 TP508 TP509 TP601 TP602 TP603 TP604 TP605 TP606 B-4 B-2 B-2 B-1 A-1 A-1 F-1 TP607 TP701 B-3 TP702 TP703 B-6 F-2 F-2 C-4 D-4 C-1 A-4 E-3 TP704 TP705 TP706 TP708 TP709 TP710 TP711 TP712 TP713 TP714 TP715 TP717 TP717 TP718 TP717 E-3 B-3 C-7 B-4 A-6 E-1 B-4 A-3 A-3 TP722 TP723 C-5 F-7 C-5 F-7 G-7 A-6 B-7 D-7 TP724 TP725 TP801 TP802 TP803 TP804 TP805 TP806

#### SS-48P(1-640-029-13)

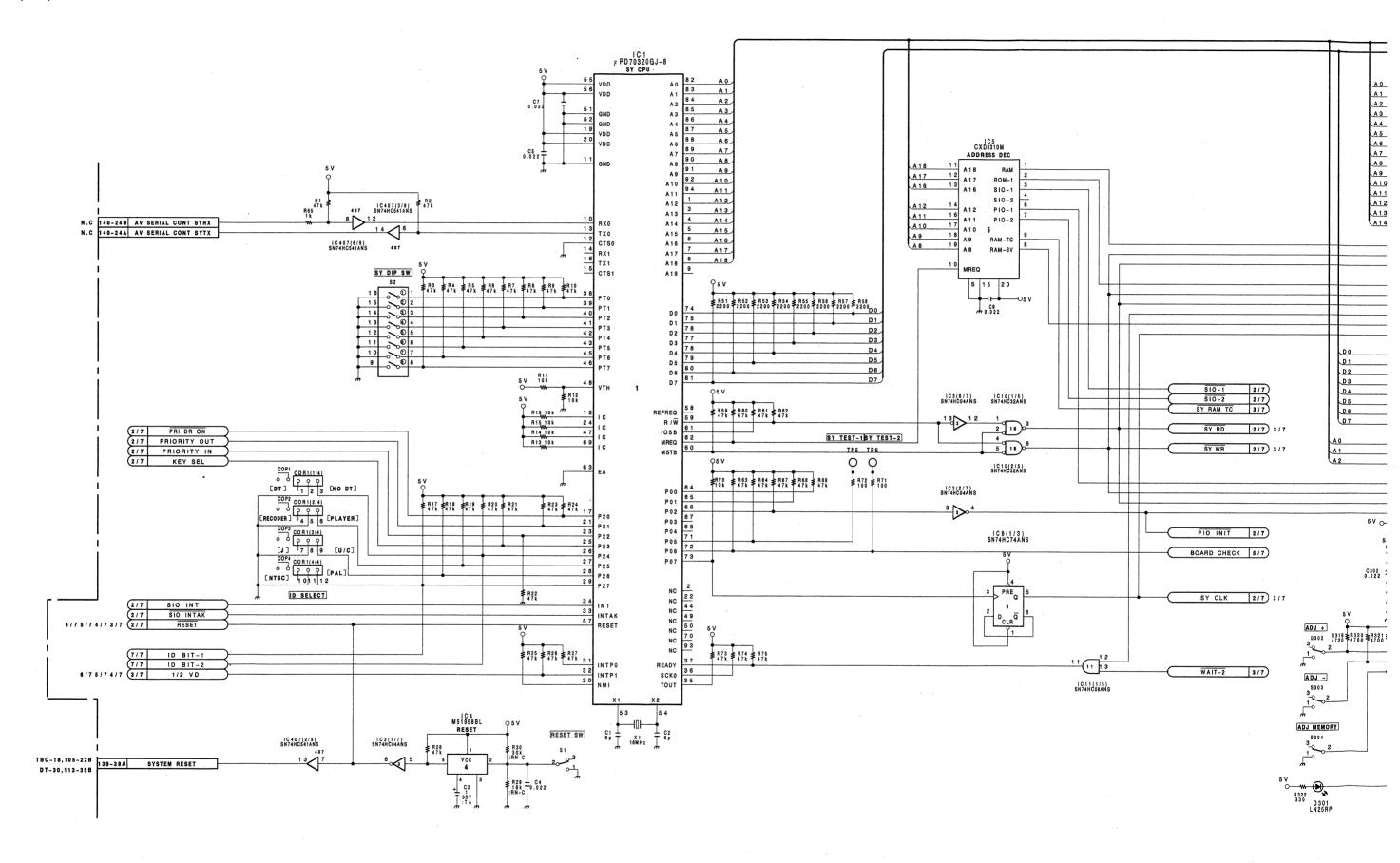
R-2 R-2 K-5 L-5 L-7 TP5 TP6
TP101
TP102
TP103
TP104
TP105
TP401
TP403
TP404
TP408
TP501 L-4 J-1 K-4 K-6 J-1 G-3 F-2 F-4 TP502 TP503 TP504 TP505 G-3 G-3 J-4 H-1 G-4 K-3 B-4 TP506 TP507 TP508 TP509 TP601 TP605 TP606 A-1 A-1 F-1 B-3 TP607 TP701 TP702 TP703 B-6 F-2 E-2 C-4 E-4 C-1 B-4 E-3 E-3 B-3 C-7 B-4 B-6 D-1 TP704 TP705 TP706 TP708 TP709 TP710 TP711 TP712 TP713 TP714 TP715 TP716 TP716 TP717 TP718 TP719 TP720 TP722 E-1 B-4 A-3 A-3 C-5 C-5 F-7 TP723 TP724 **TP725** C-5 F-7 G-7 B-6 B-7 C-7 TP801 **TP802 TP803** TP804 TP805

**TP806** 

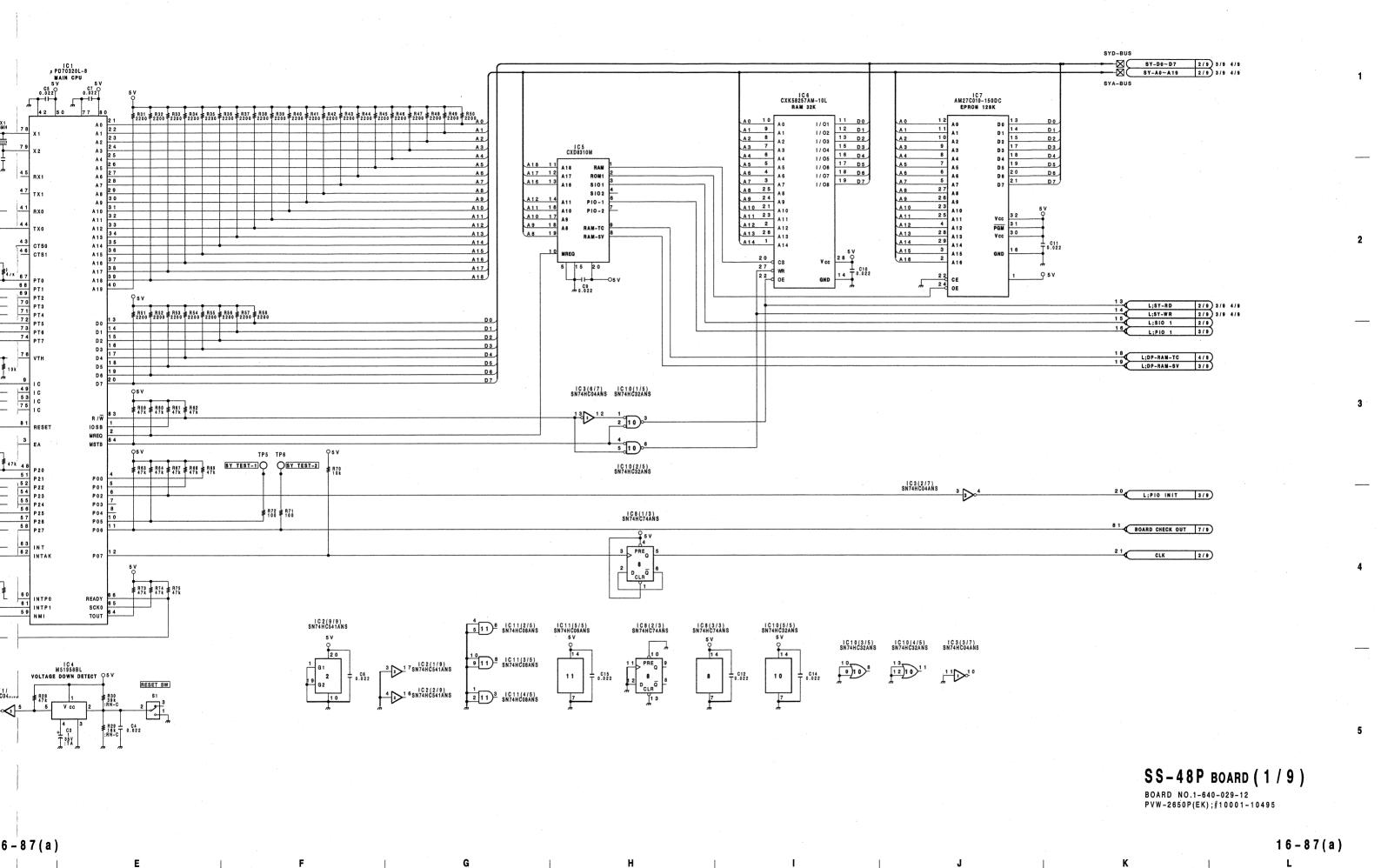
### SS-48P(1/9); SYSTEM CONTROL

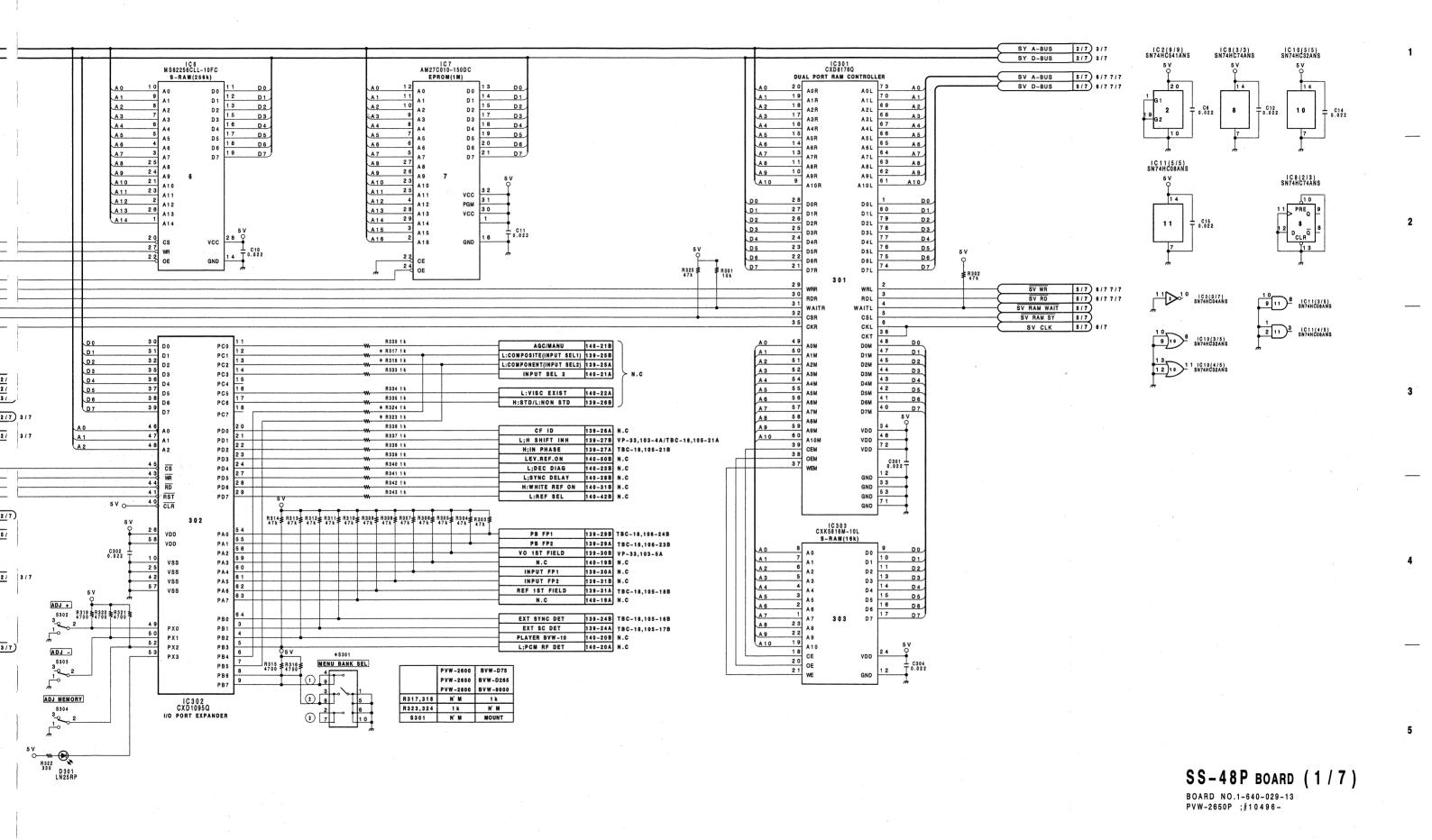


16-87(a) A B C D E F G H



16-87(b) A B C D E F G H





16-87(b)

M

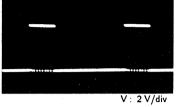
N

#### -12) SS

SS-48P(1-640-029-		
TP5 TP6 TP101 TP102 TP103 TP104 TP105 TP401 TP402 TP403 TP404 TP408 TP501 TP500 TP506 TP507 TP506 TP507 TP506 TP507 TP509 TP601 TP602 TP603 TP604 TP602 TP603 TP604 TP606 TP707 TP701 TP702 TP703 TP704 TP705 TP706 TP701 TP702 TP703 TP704 TP705 TP706 TP707 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP702 TP703 TP706 TP708 TP709 TP701 TP702 TP703 TP706 TP708 TP709 TP701 TP705 TP706 TP708 TP709 TP705 TP706 TP708 TP709 TP701 TP711 TP712 TP713 TP714 TP715 TP717 TP718 TP719 TP720 TP722 TP723 TP724 TP725 TP801 TP802 TP803 TP804 TP805 TP805 TP806	P-P-L-K-L-L-J-N-K-Q-J-G-F-F-G-G-J-G-G-K-B-B-B-B-A-A-F-B-B-F-F-C-D-C-A-E-E-B-C-B-A-B-B-A-S-5-7-7-6-7-7-1-2-2-6-5-7-7-4-6-2-4-3-3-5-5-7-5-7-7-6-7-7-1-2-2-6-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-7-1-2-6-2-2-4-4-1-4-3-3-3-5-5-7-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-7-1-2-6-2-2-4-4-1-4-3-3-3-5-5-7-5-7-7-6-7-7-1-2-6-2-2-4-4-1-4-3-3-3-5-5-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8	

① TP 104 EE/PB

② TP 105 EE/PB



H: 5 ms/div



H: 5 ms/div

B-4

E-3 E-3 B-3 C-7

B-4 B-6

D-1 E-1 B-4 A-3 A-3 C-5 C-5 F-7

G-7

B-6 B-7 C-7 D-1

TP710 TP711 TP712 TP713 TP714 TP715

TP716 TP717

TP718

TP719 TP720 TP722 TP723

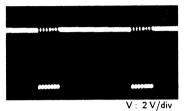
TP724 TP725 TP801 TP802

**TP803 TP804 TP805 TP806**  ① TP 104 EE/PB

② TP 105 EE/PB

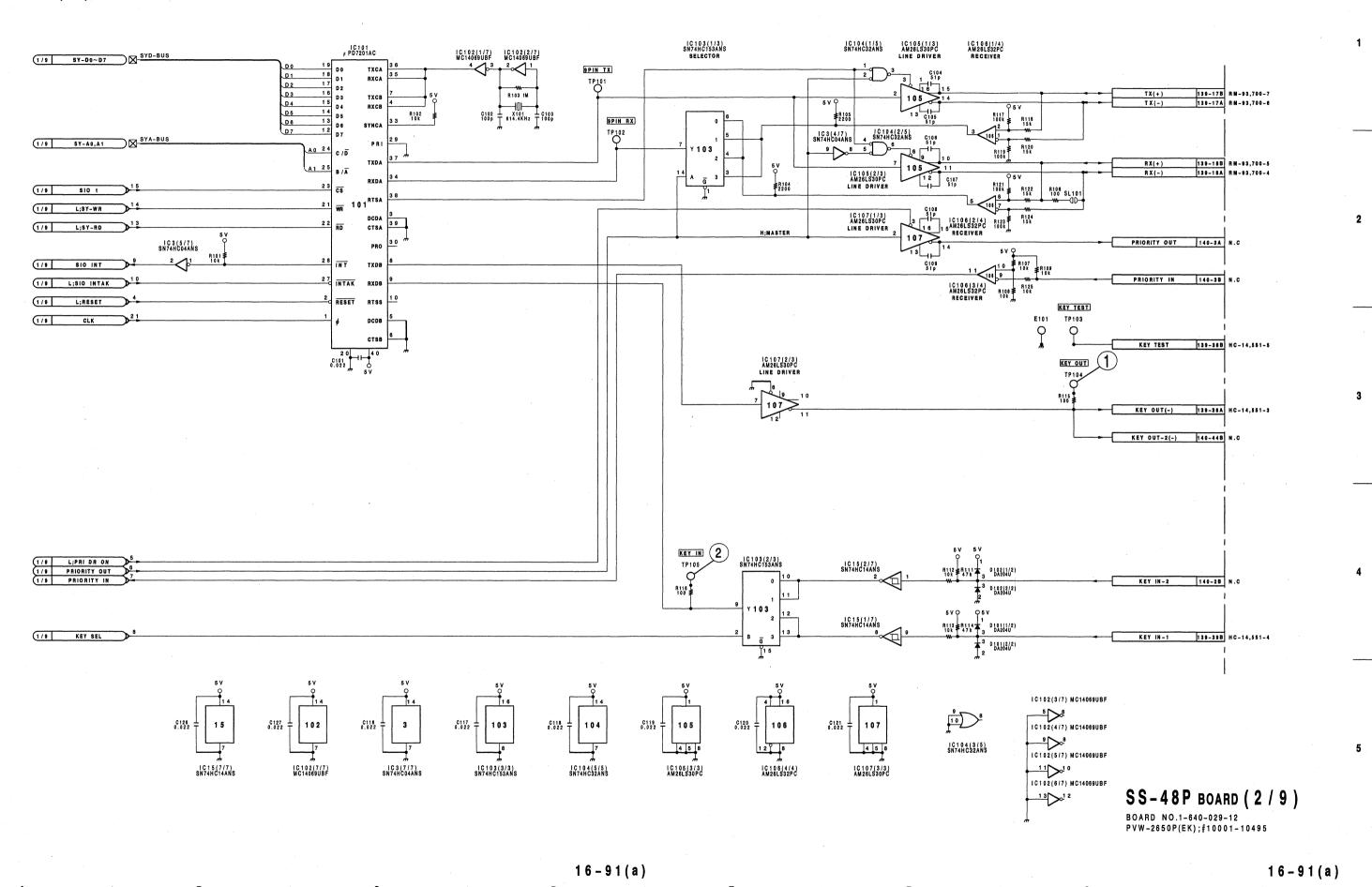


H: 5 ms/div

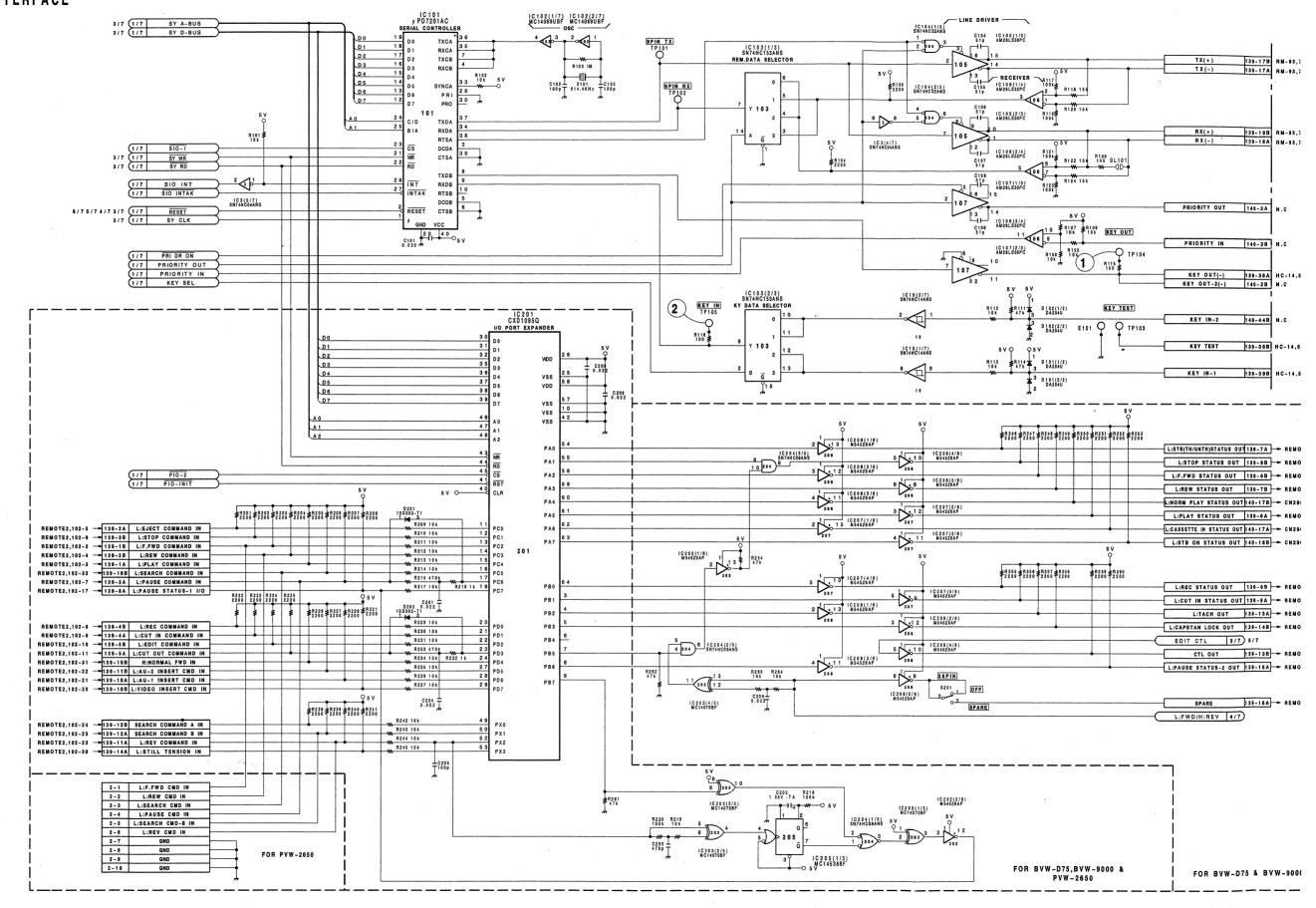


H: 5 ms/div

### SS-48P(2/9);SYSTEM CONTROL







16-91(b) A B C D E F G H

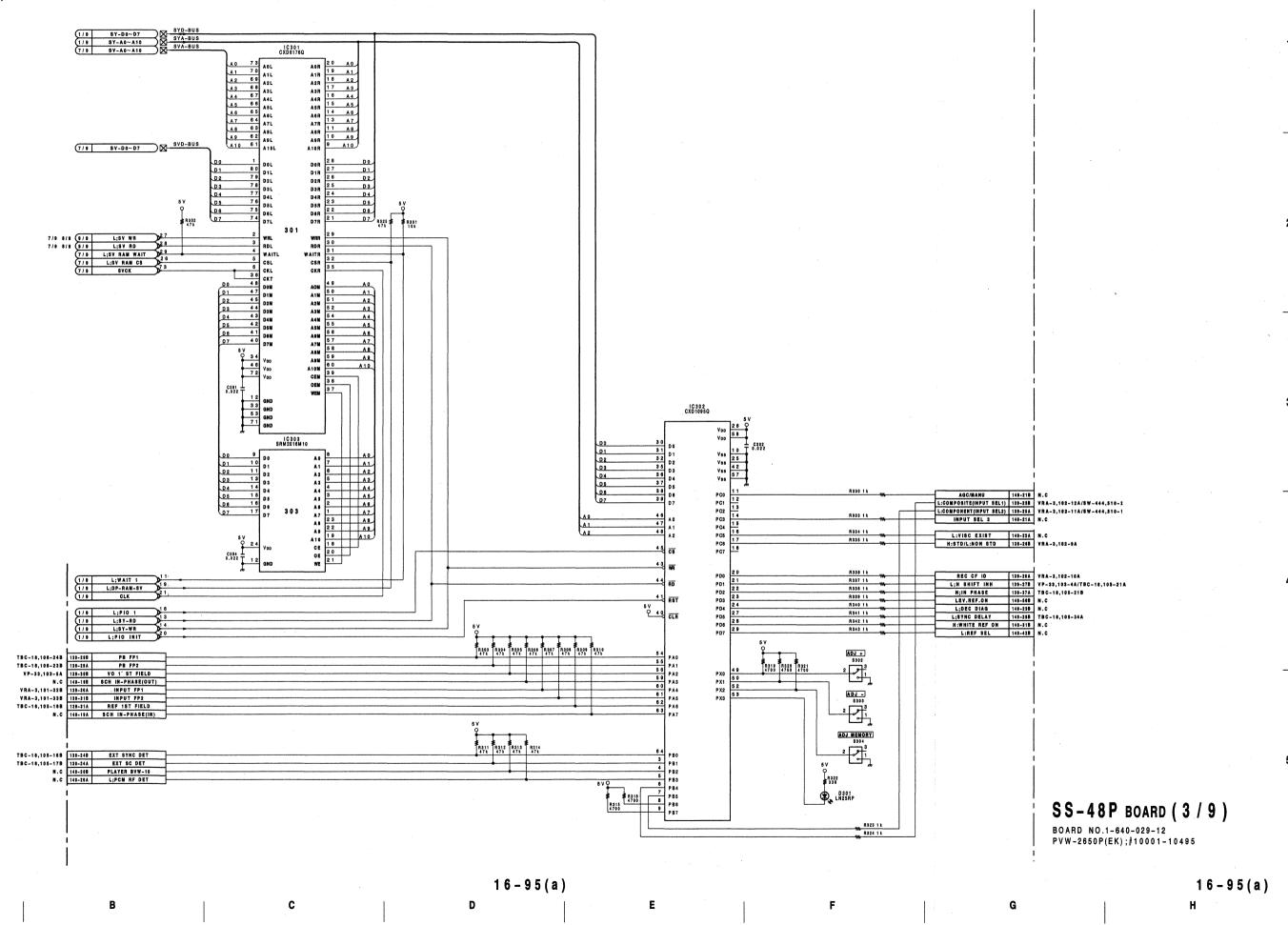
#### SS-48P(1-640-029-12)

TP5 TP6 TP101 TP102 L-6 K-5 L-7 L-7 TP103 TP104 TP105 L-4 **TP401** J-6 TP402 N-2 K-4 Q-7 J-1 TP403 TP404 TP408 TP501 G-3 F-2 F-4 G-3 TP501 TP502 TP503 TP504 TP505 TP506 TP507 TP508 TP509 TP601 TP602 B-4 B-2 TP603 TP604 B-2 B-1 A-1 A-1 F-1 TP605 TP606 TP607 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP710 TP711 TP711 TP712 TP713 B-3 B-6 F-2 F-2 C-4 D-4 C-1 A-4 E-3 TP714 TP715 A-6 E-1 B-4 TP717 TP718 TP719 TP720 A-3 A-3 C-5 F-7 C-5 F-7 G-7 A-6 B-7 D-7 TP722 TP723 TP724 TP725 TP801 TP801 TP802 TP803 TP804 TP805 TP806 D-1

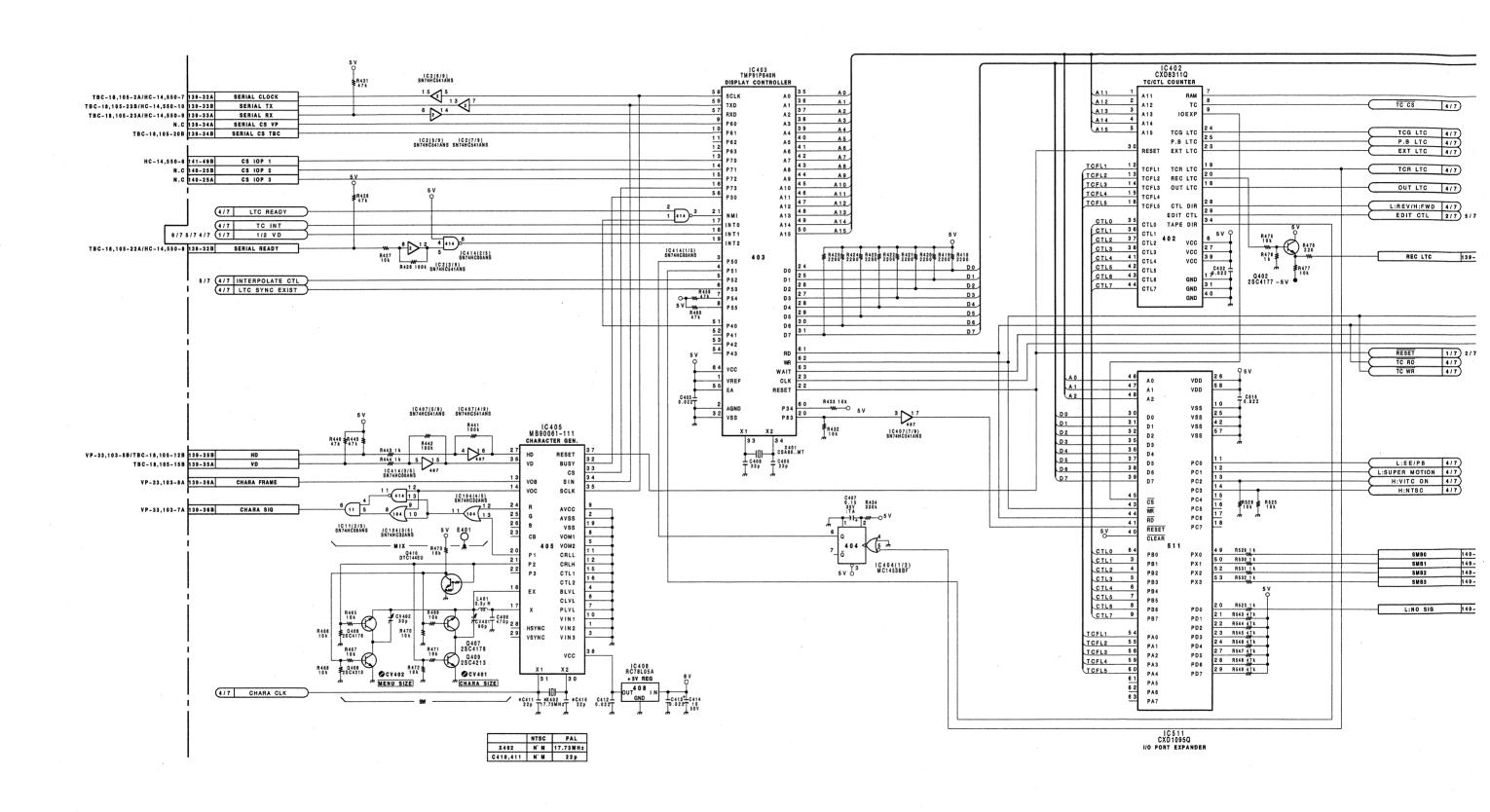
#### SS-48P(1-640-029-13)

TP5 R-2 R-2 K-5 TP6 TP101 L-5 L-7 L-7 L-4 TP102 TP103 TP104 TP105 TP401 TP403 J-1 K-4 TP403 TP404 TP408 TP501 K-6 J-1 G-3 F-2 F-4 G-3 G-3 TP502 TP503 TP504 TP505 TP506 TP507 J-4 H-1 G-4 **TP508 TP509** K-3 TP601 B-4 TP605 A-1 TP606 TP607 A-1 F-1 B-3 B-6 F-2 E-2 C-4 E-4 C-1 B-4 E-3 E-3 B-3 C-7 **TP701 TP702** TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP710 TP711 TP7112 TP713 TP714 B-4 TP715 TP716 B-6 D-1 TP717 TP718 E-1 B-4 A-3 A-3 C-5 C-5 F-7 TP719 TP720 TP722 TP723 TP724 TP724 TP725 TP801 TP802 TP803 F-7 G-7 B-6 B-7 TP804 TP805 C-7 D-1 TP806

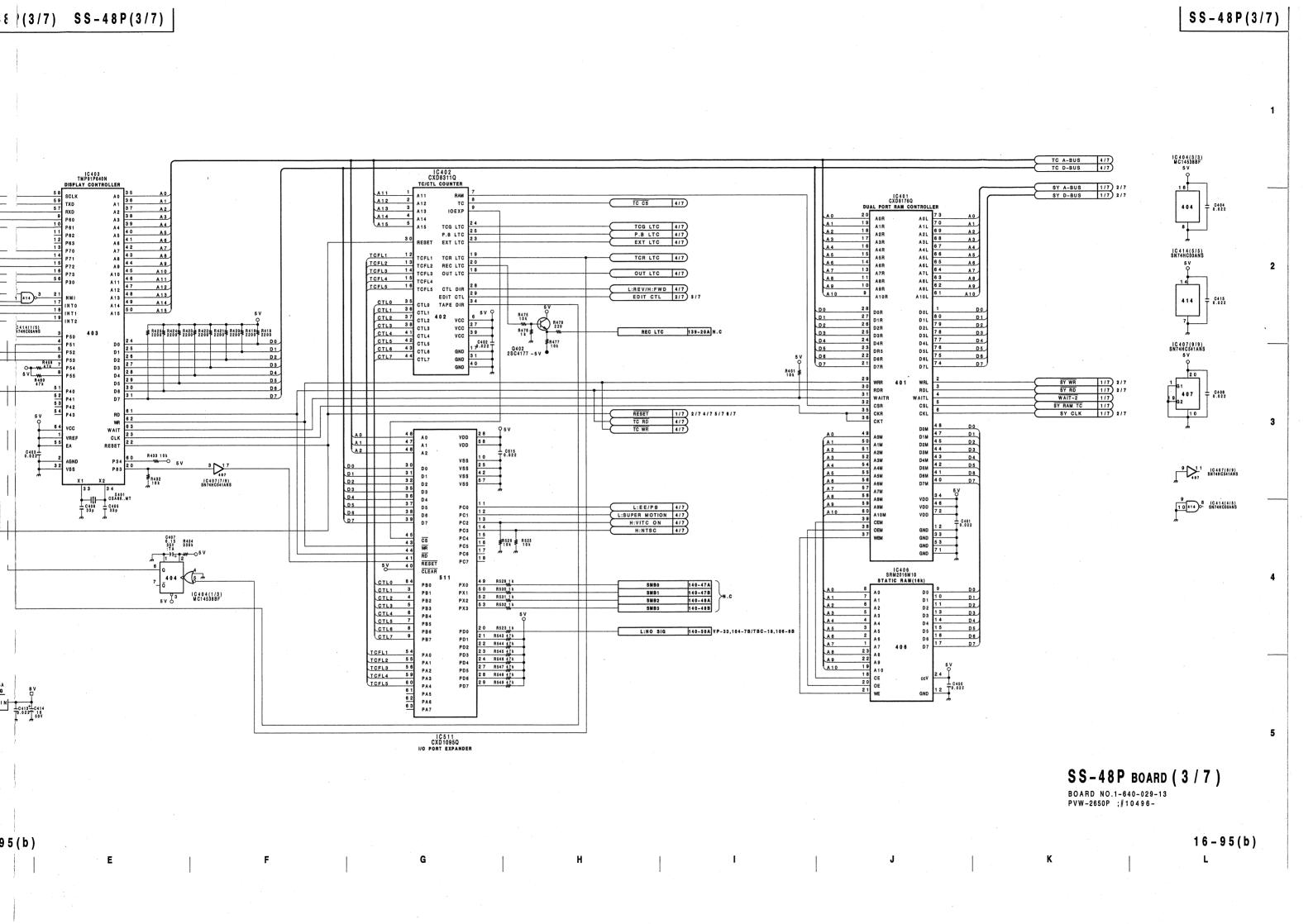
#### SS-48P(3/9); SYSTEM CONTROL



## SS-48P(3/7); CHARACTER GENERATOR, DISPLAY/RAM CONTROLLER, TC/CTL COUNTER



16-95(b) A B C D E F G H



#### SS-48P(1-640-029-12)

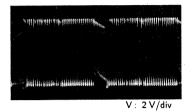
SS-48P(1-640-029-1		
TP5 TP6 TP101 TP102 TP103 TP104 TP104 TP105 TP401 TP402 TP403 TP404 TP505 TP506 TP506 TP506 TP507 TP508 TP509 TP601 TP602 TP603 TP604 TP605 TP606 TP607 TP701 TP702 TP703 TP704 TP705 TP706 TP701 TP702 TP703 TP704 TP705 TP706 TP707 TP701 TP707 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP710 TP711 TP712 TP713 TP714 TP715 TP717 TP718 TP719 TP720 TP723 TP724 TP725 TP801 TP802 TP803 TP806 TP806 TP806	P-2 P-2 P-2 P-2 P-2 P-2 P-2 P-3 P-3 P-3 P-3 P-3 P-3 P-3 P-3 P-3 P-3	

① TP 404 PB

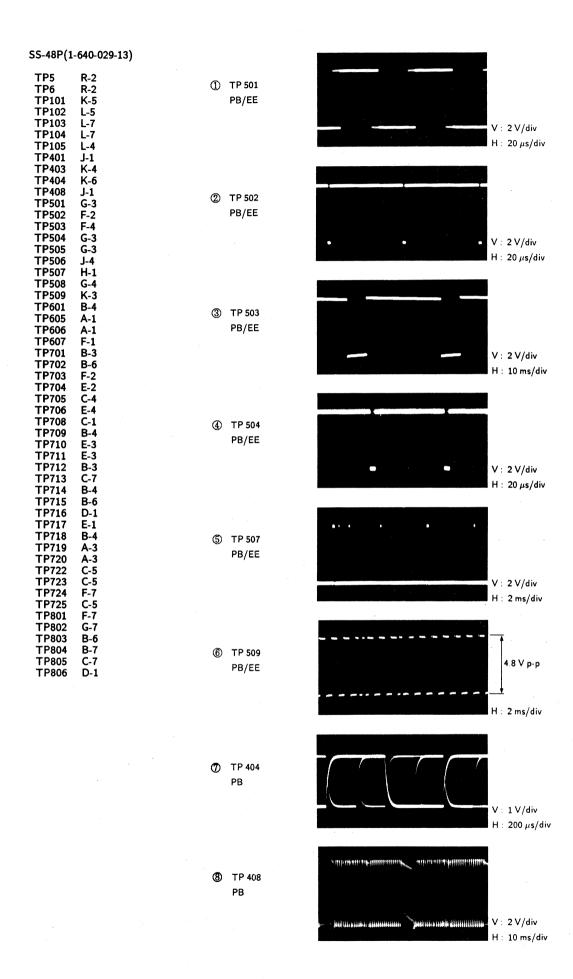
② TP 408 PB

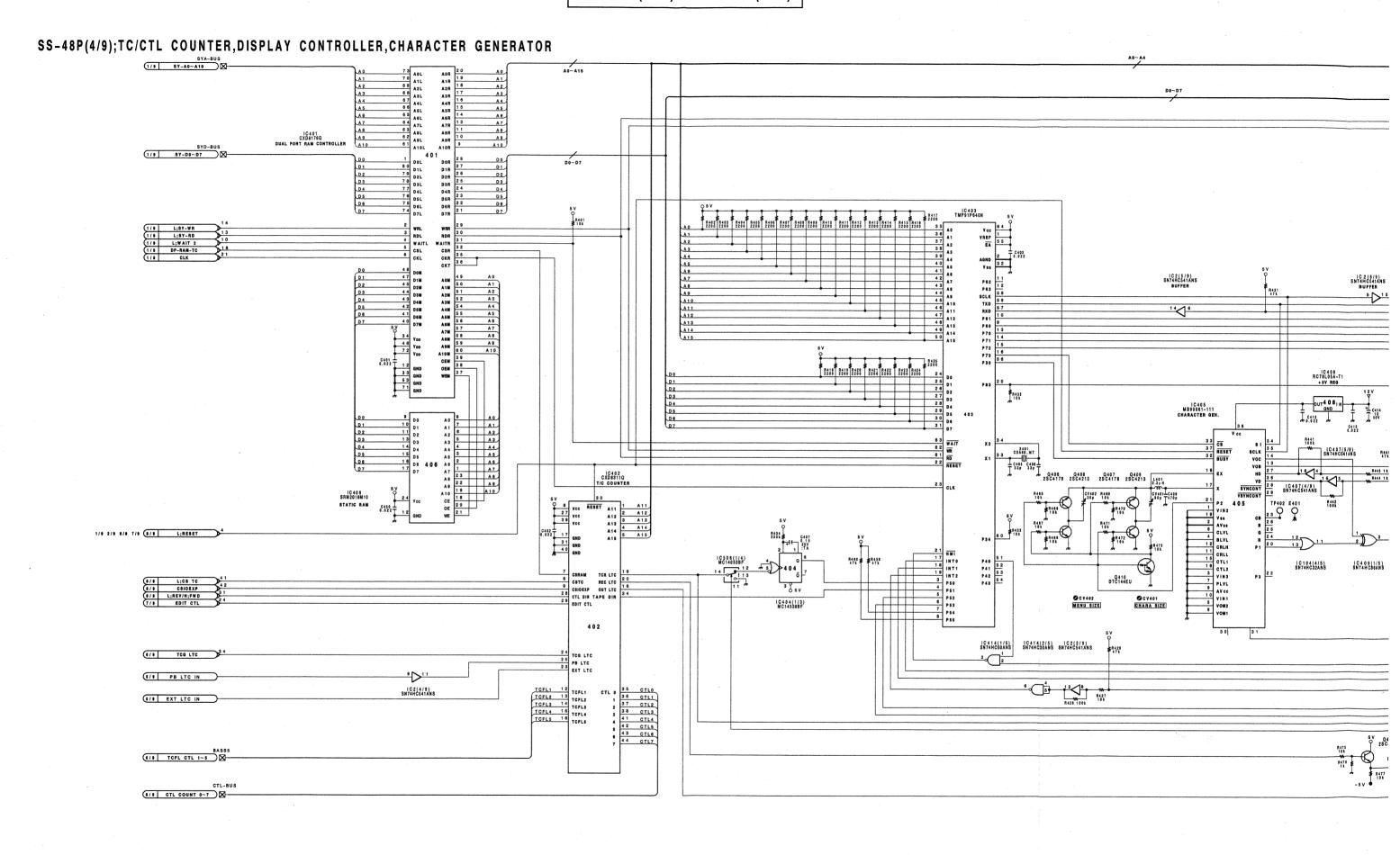


V : 1 V/div H : 200 μs/div



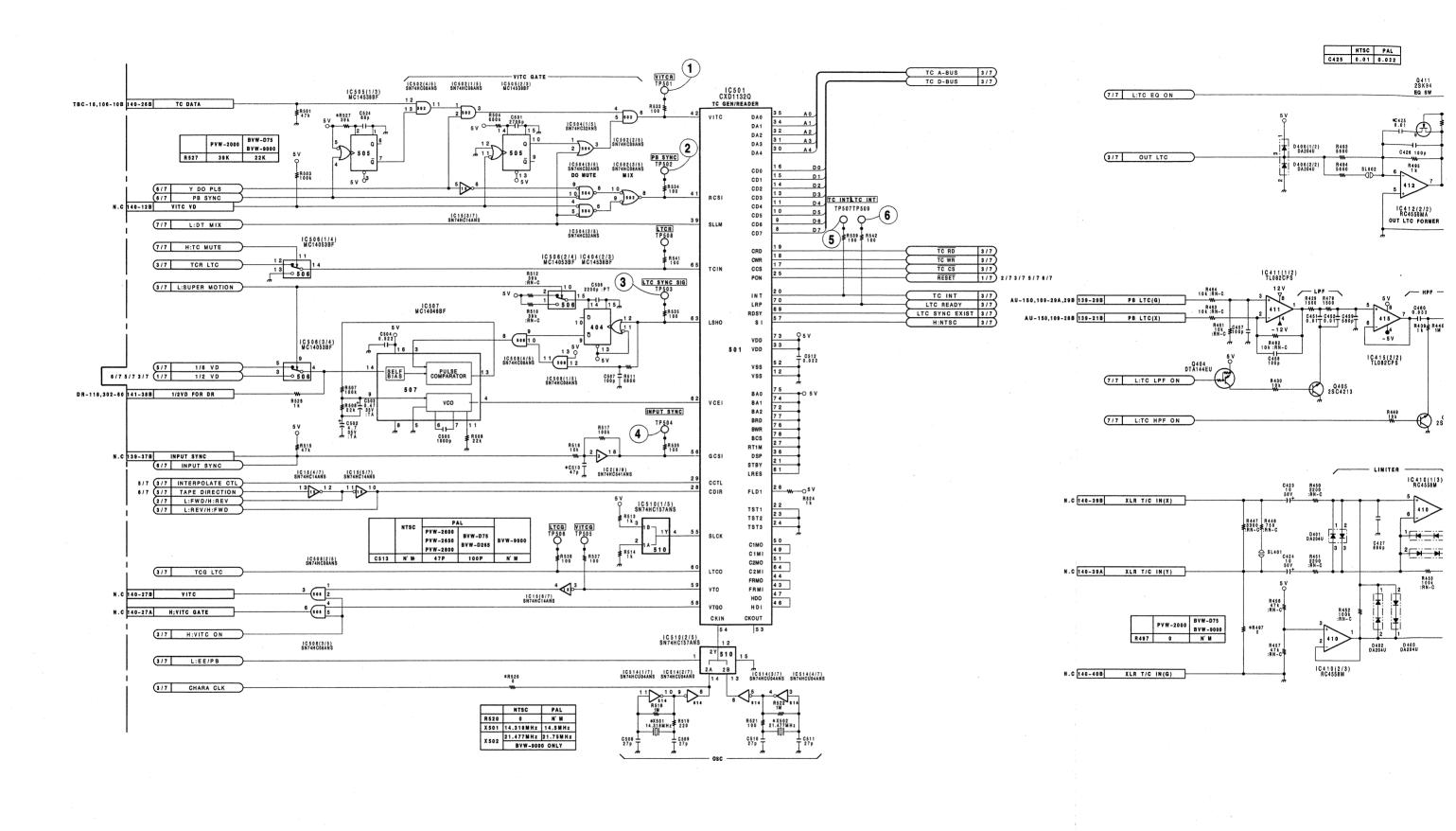
H: 10 ms/div



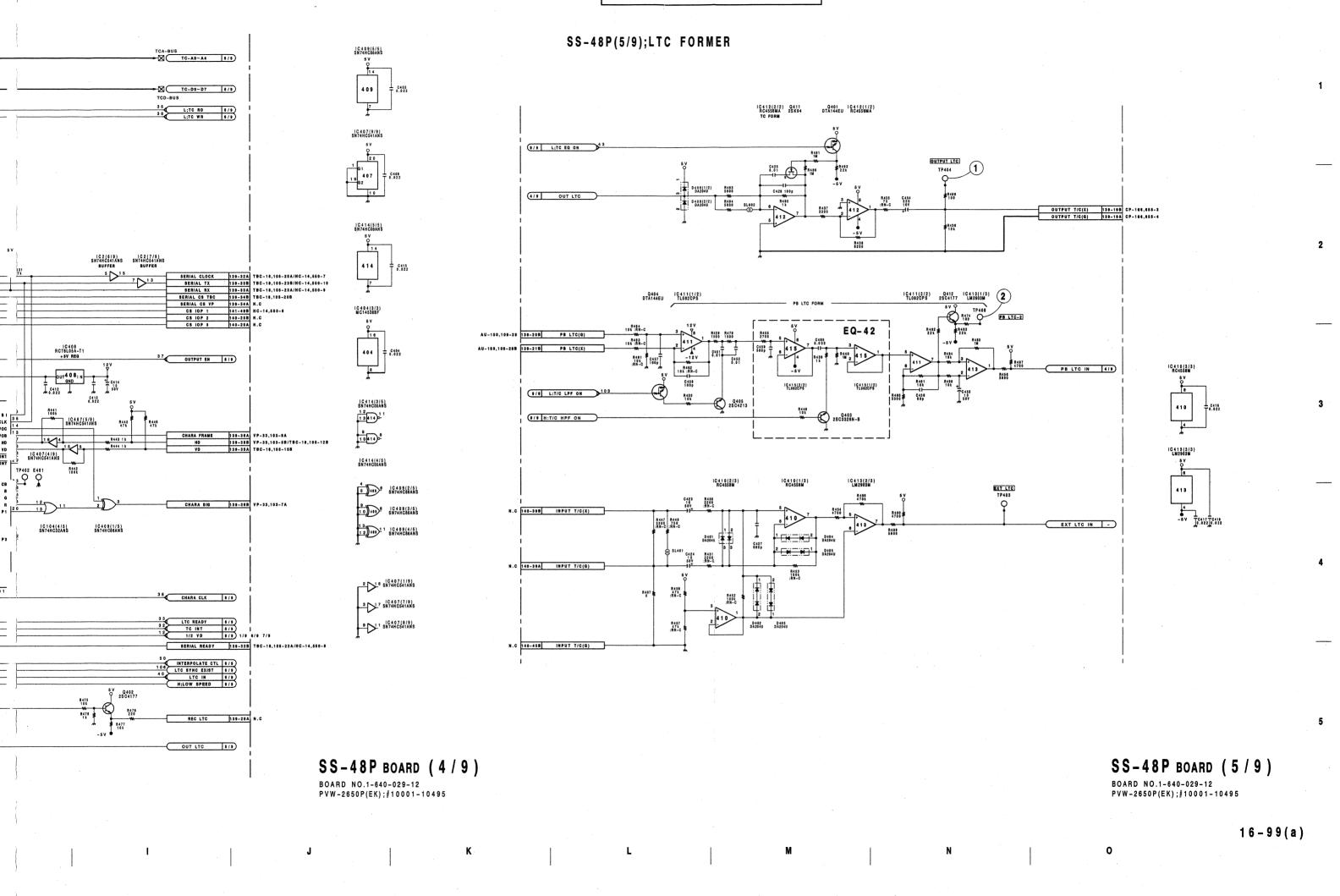


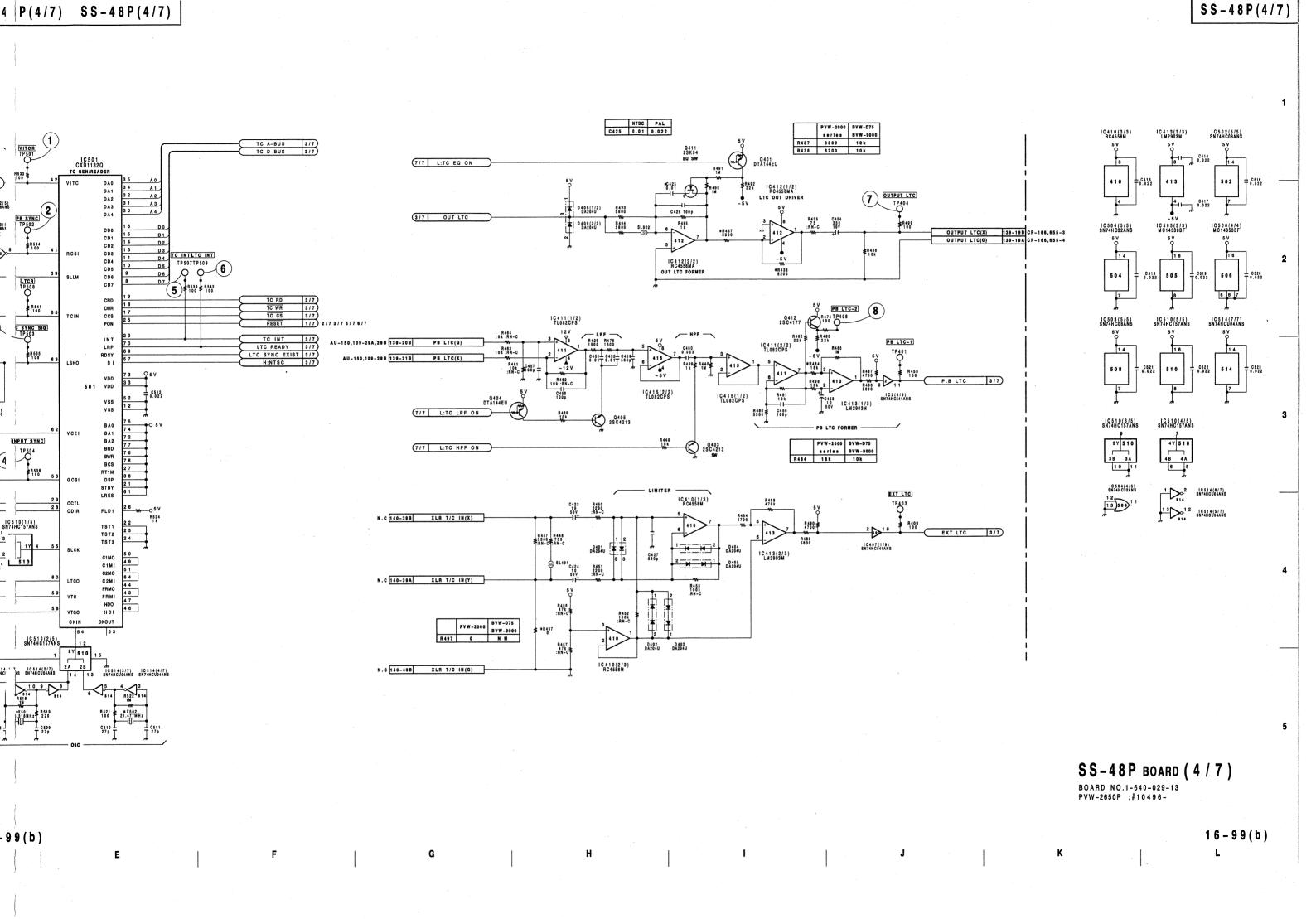
16-99(a) A B C D E F G H

### SS-48P(4/7);TC GEN/READER,LTC FORMER



16-99(b)



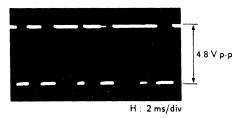


#### SS-48P(1-640-029-12) P-2 P-2 L-6 K-5 L-7 ① TP 501 TP6 TP101 PB/EE TP102 TP103 TP104 TP105 L-7 L-4 V: 2 V/div TP401 TP402 J-6 N-2 K-4 Q-7 J-1 G-3 F-2 F-4 G-3 G-3 J-4 G-1 G-4 H : 20 μs/div TP403 TP403 TP404 TP408 TP501 TP502 TP503 TP504 TP505 TP506 ② TP 502 PB/EE **TP507** V: 2 V/div TP508 H : 20 μs/div **TP509** K-3 **TP601** TP602 TP603 B-2 B-2 ③ TP 503 TP604 TP605 B-1 A-1 F-1 B-3 B-6 F-2 F-2 C-4 C-1 A-4 E-3 E-3 PB/EE TP606 TP607 TP607 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP710 V: 2 V/div H: 10 ms/div ④ TP 504 PB/EE TP711 B-3 C-7 **TP712** TP713 **TP714 B-4** A-6 E-1 B-4 A-3 **TP715** V: 2 V/div **TP717** H : 20 μs/div TP718 TP719 TP720 TP722 C-5 TP723 TP724 C-5 F-7 (5) TP 507 PB/EE C-5 F-7 **TP725** TP801 G-7 A-6 B-7 D-7 TP802 TP803 TP804 TP805 TP806 V: 2 V/div H: 2 ms/div ⑥ TP 509 4.8 V p-p PB/EE H: 2 ms/div

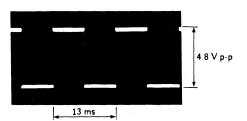
# SS-48P(1-640-029-13)

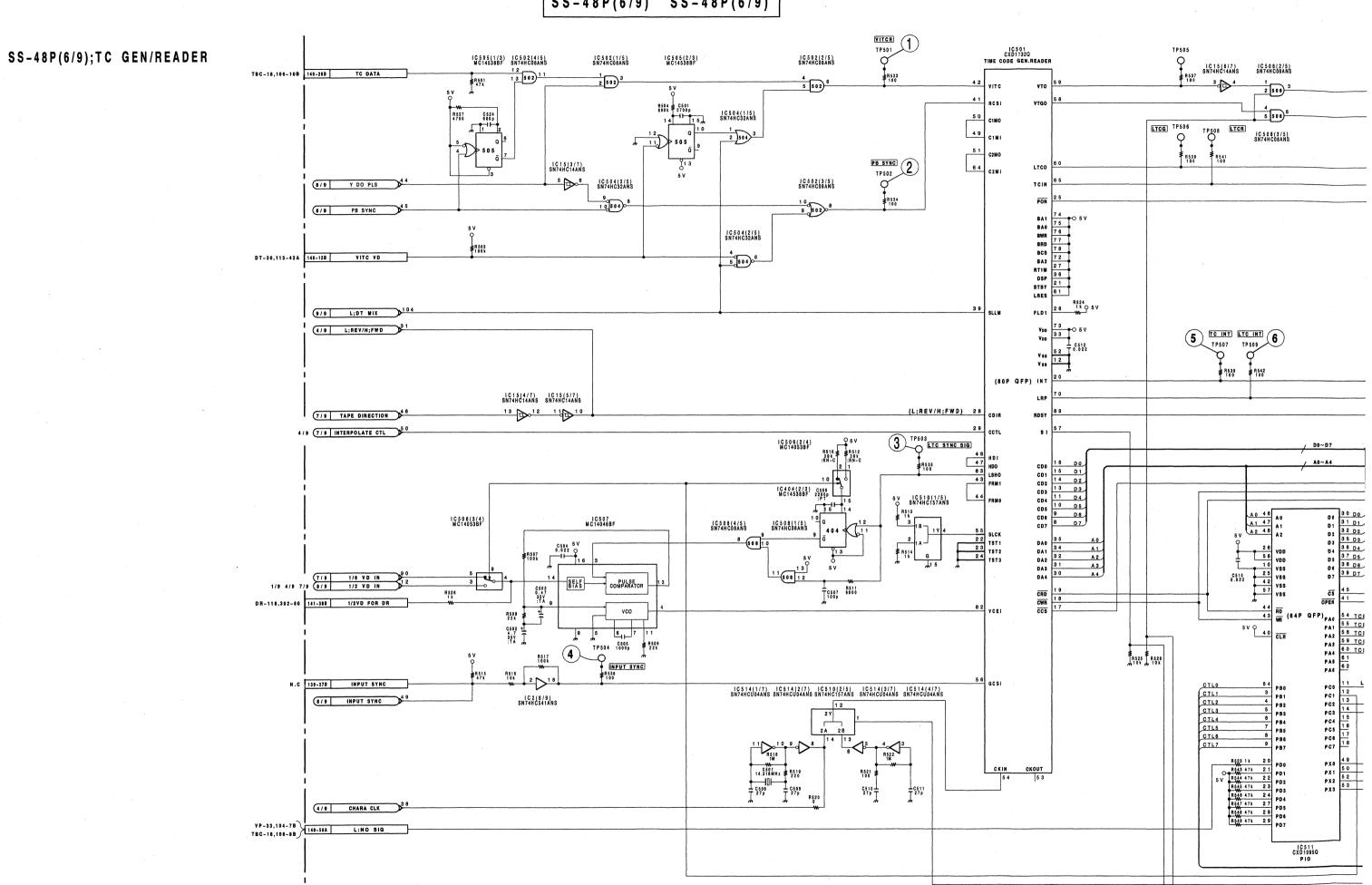
SS-48P(1-640-029-		
TP5 TP6 TP101 TP102 TP103 TP104 TP105 TP401 TP408 TP501 TP502 TP503 TP506 TP507 TP508 TP506 TP507 TP508 TP509 TP606 TP607 TP701 TP605 TP606 TP607 TP701 TP702 TP703 TP704 TP705 TP708 TP709 TP711 TP712 TP713 TP714 TP715 TP716 TP717 TP718 TP717 TP718 TP719 TP720 TP722 TP723 TP718 TP719 TP720 TP725 TP801 TP802 TP803 TP804 TP805 TP806	R-22557741461324341434111362244143374611433557575776771	

① TP 606 PB



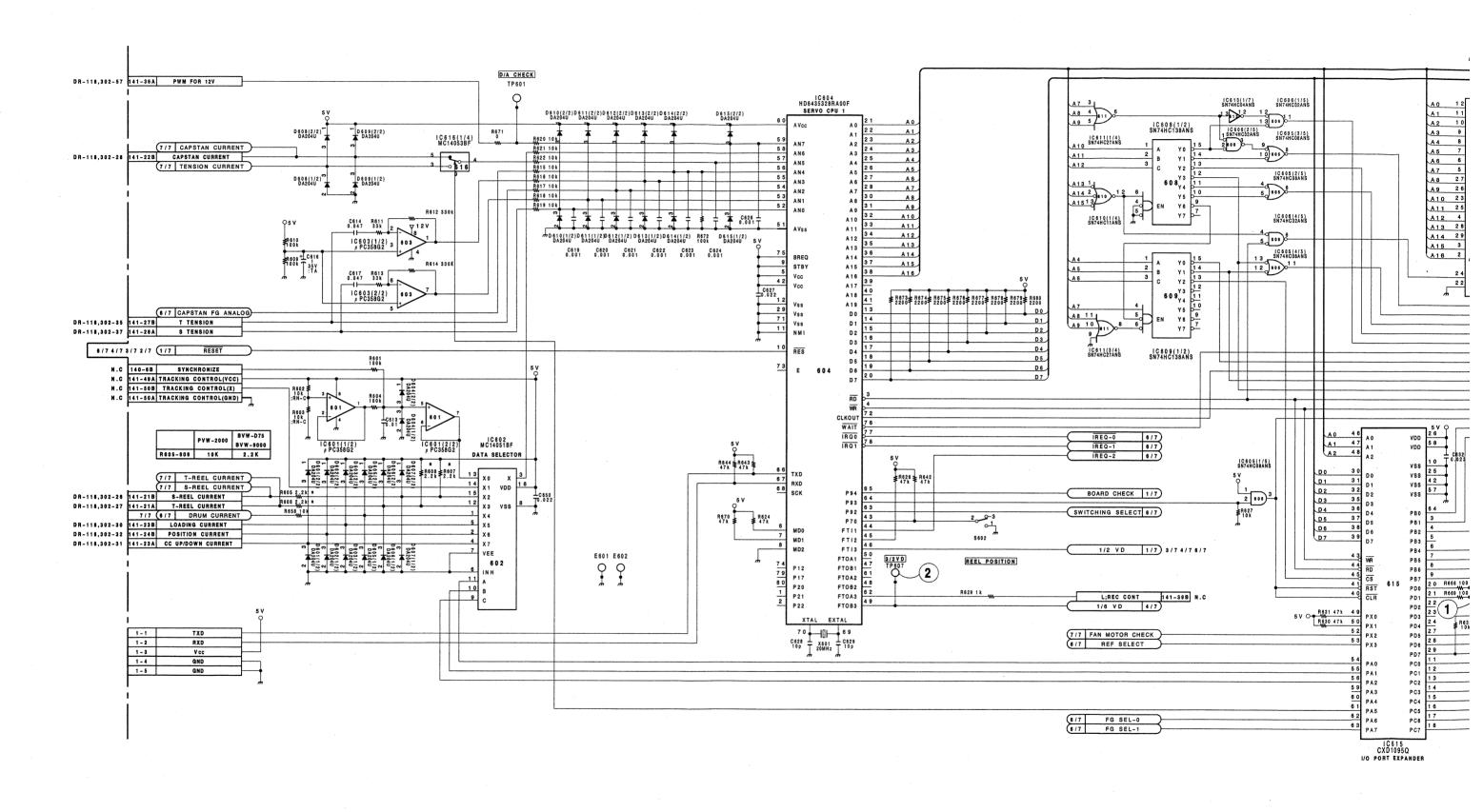
② TP 607 PB/EE



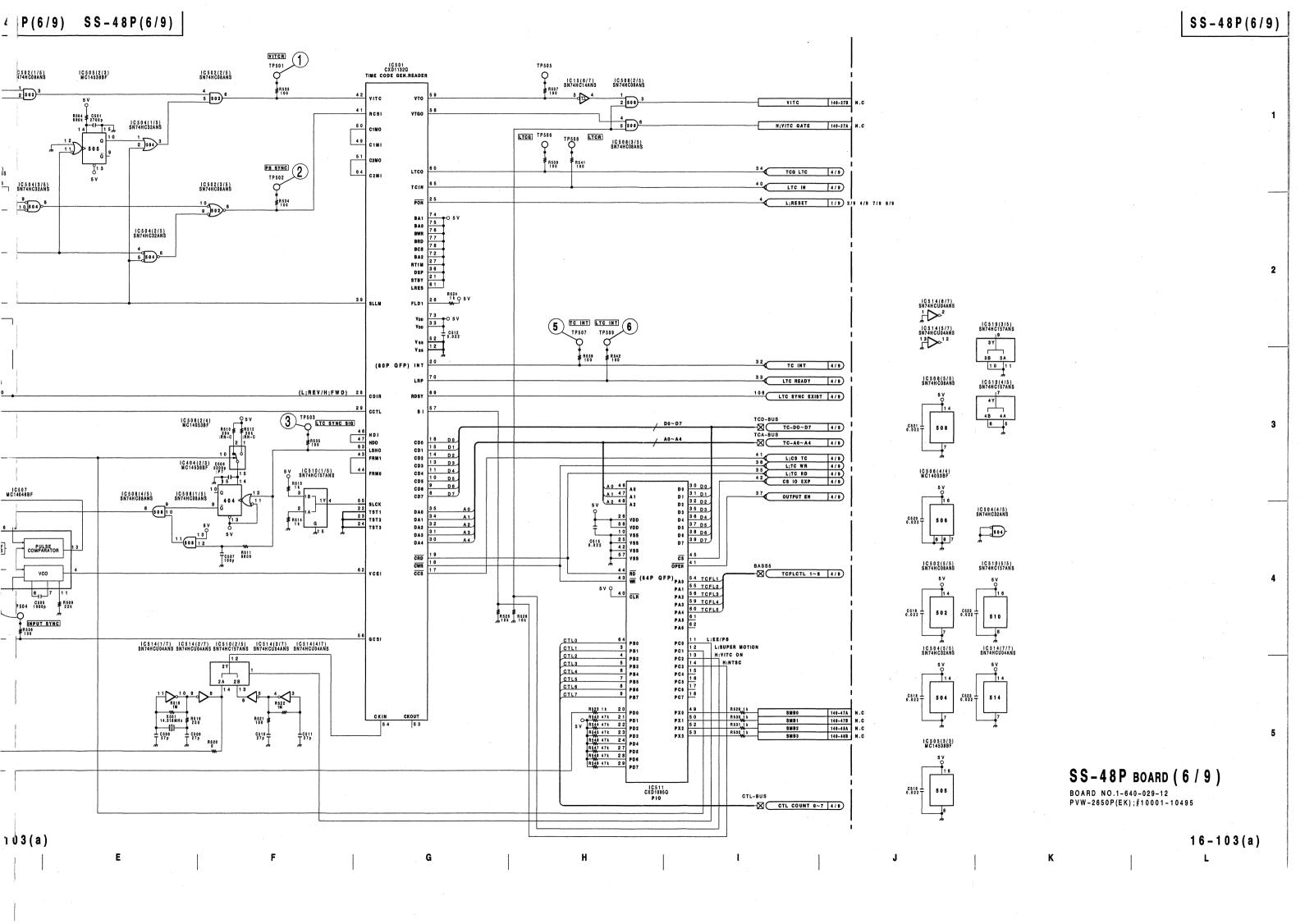


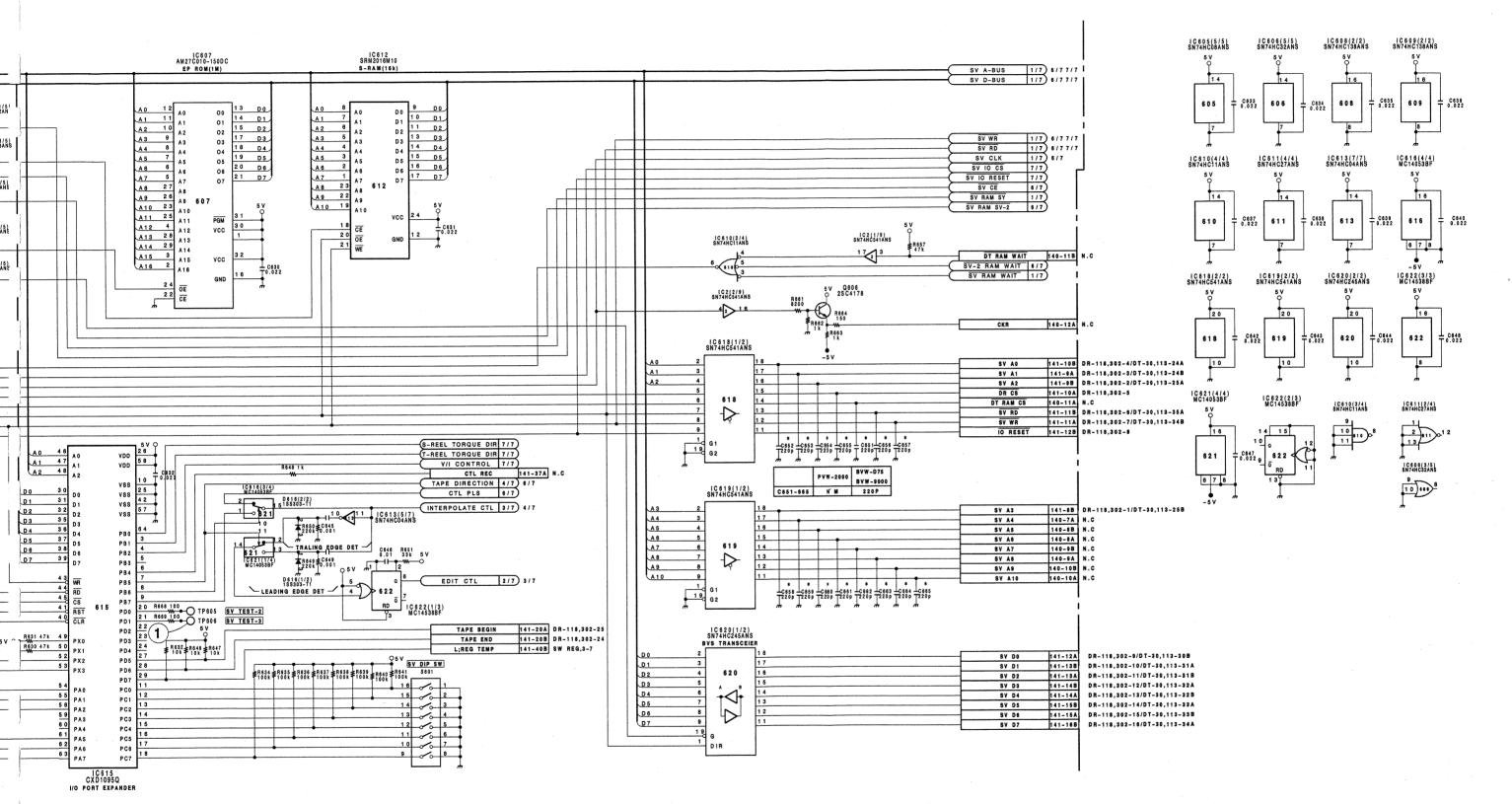
16-103(a)

### SS-48P(5/7); SERVO SYSTEM MAIN



16-103(b) A B C D E F G H I





# SS-48P BOARD (5/7)

BOARD NO.1-640-029-13 PVW-2650P ;#10496-

16-103(b)

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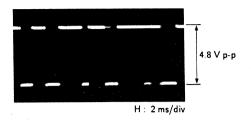
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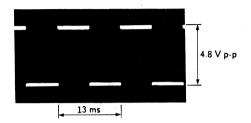
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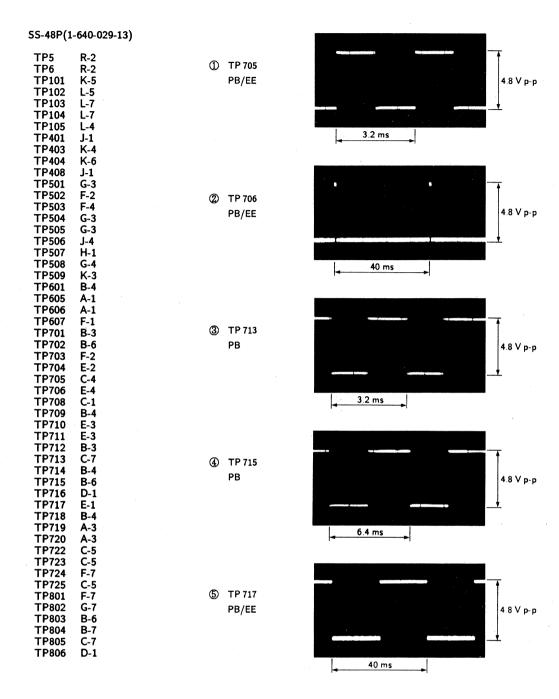
### SS-48P(1-640-029-12)

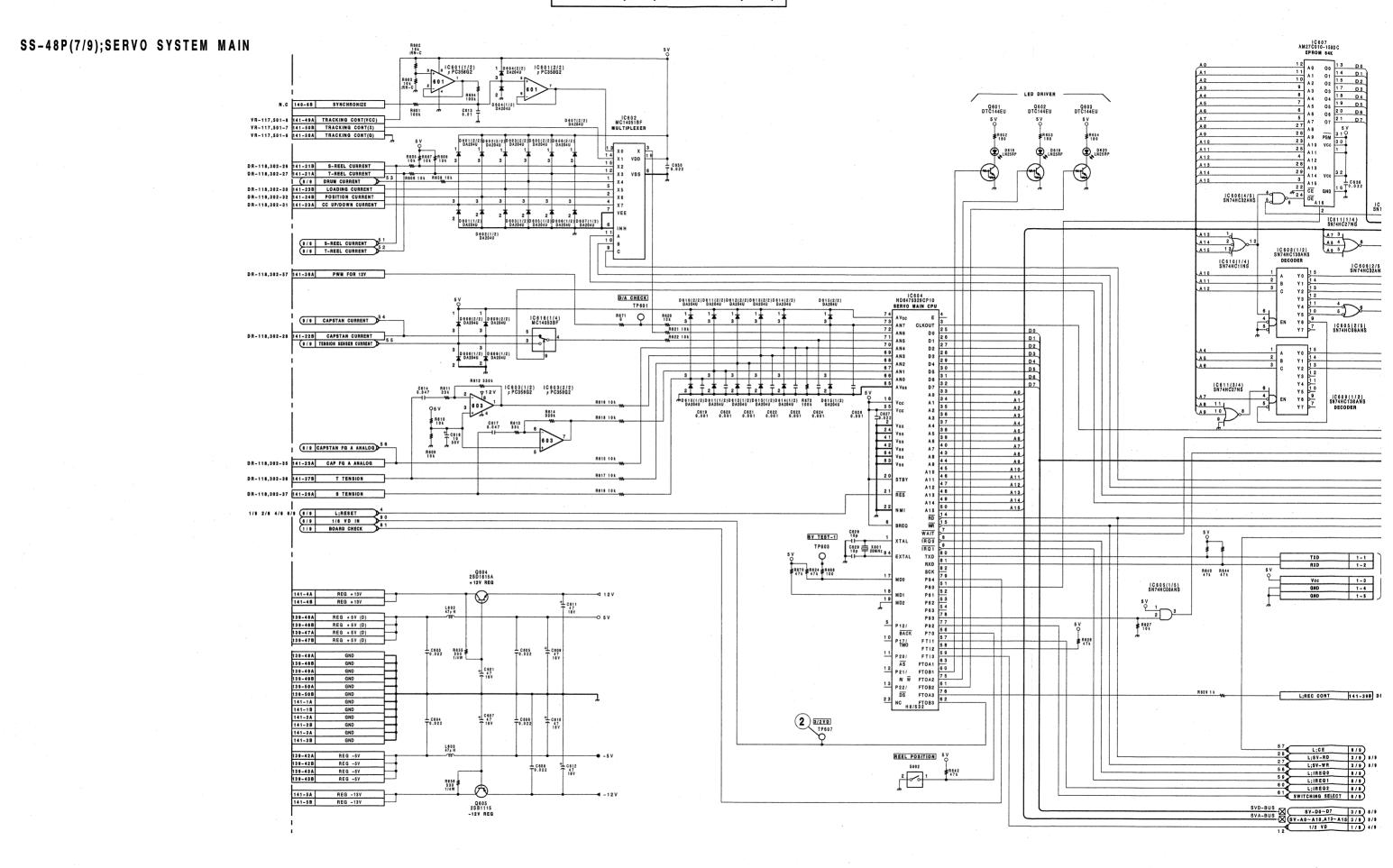
SS-48P(1-640-029		
TP5 TP6 TP101 TP102 TP103 TP104 TP105 TP401 TP402 TP403 TP404 TP505 TP506 TP507 TP508 TP506 TP507 TP508 TP509 TP601 TP602 TP603 TP604 TP605 TP606 TP707 TP708 TP707 TP708 TP701 TP702 TP703 TP704 TP705 TP706 TP707 TP708 TP709 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP710 TP711 TP712 TP713 TP7118 TP719 TP720 TP722 TP723 TP723 TP724 TP725 TP801 TP802 TP803 TP806	P-2-2-6-5-7-7-4-6-2-4-7-1-3-2-4-3-3-4-1-4-3-4-2-2-1-1-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-6-7-7-1-2-2-6-5-7-7-4-6-2-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-3-7-4-6-1-4-3-3-3-5-5-7-5-7-7-6-7-7-1-3-6-2-2-4-4-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-7-4-6-1-4-3-3-3-3-7-4-6-1-4-3-3-3-3-7-4-6-1-4-3-3-3-3-7-4-6-1-4-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3	

- ① TP 606 PB
- ② TP 607 PB/EE

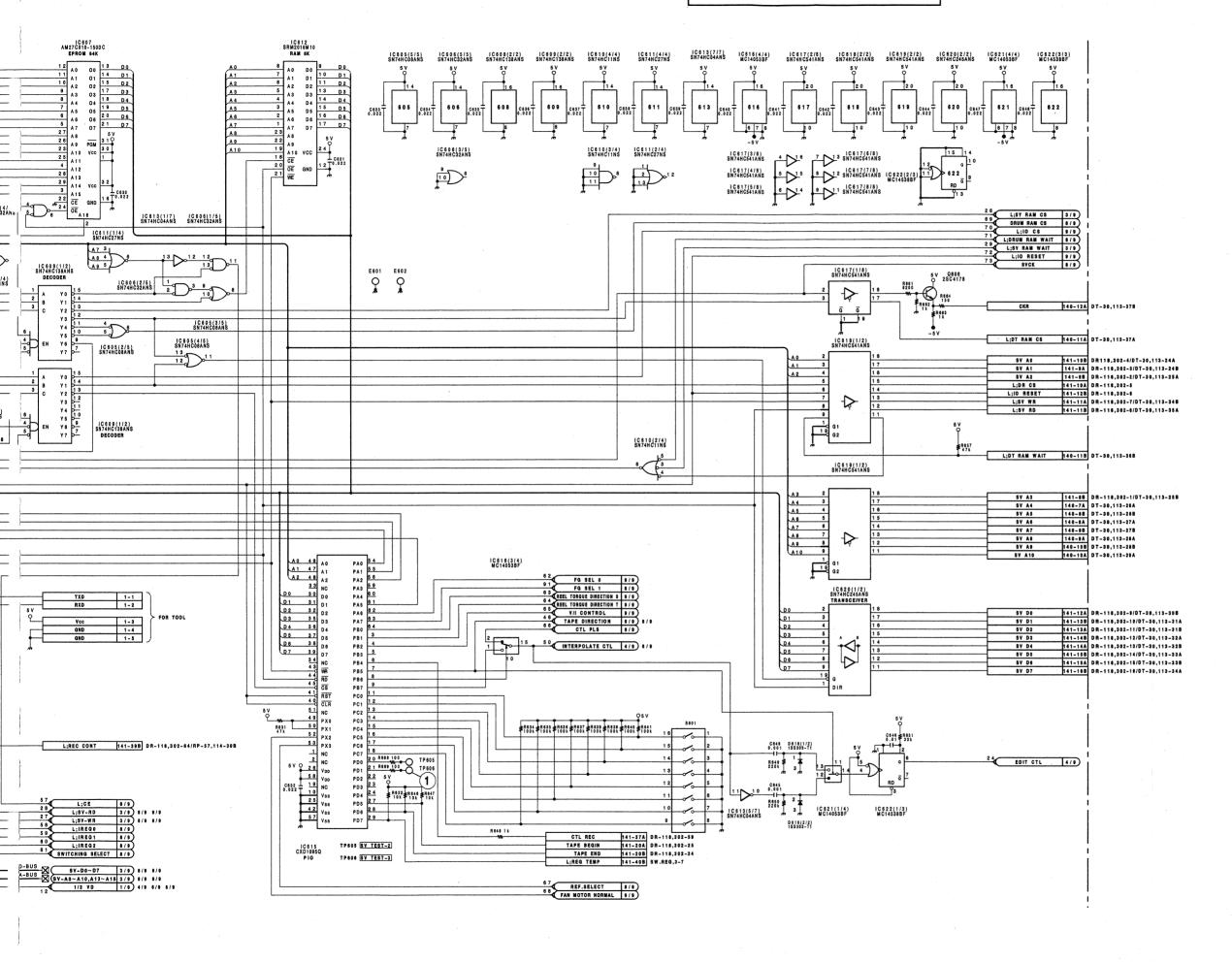








16-107(a) A В С D E F G H



SS-48P BOARD (7/9)

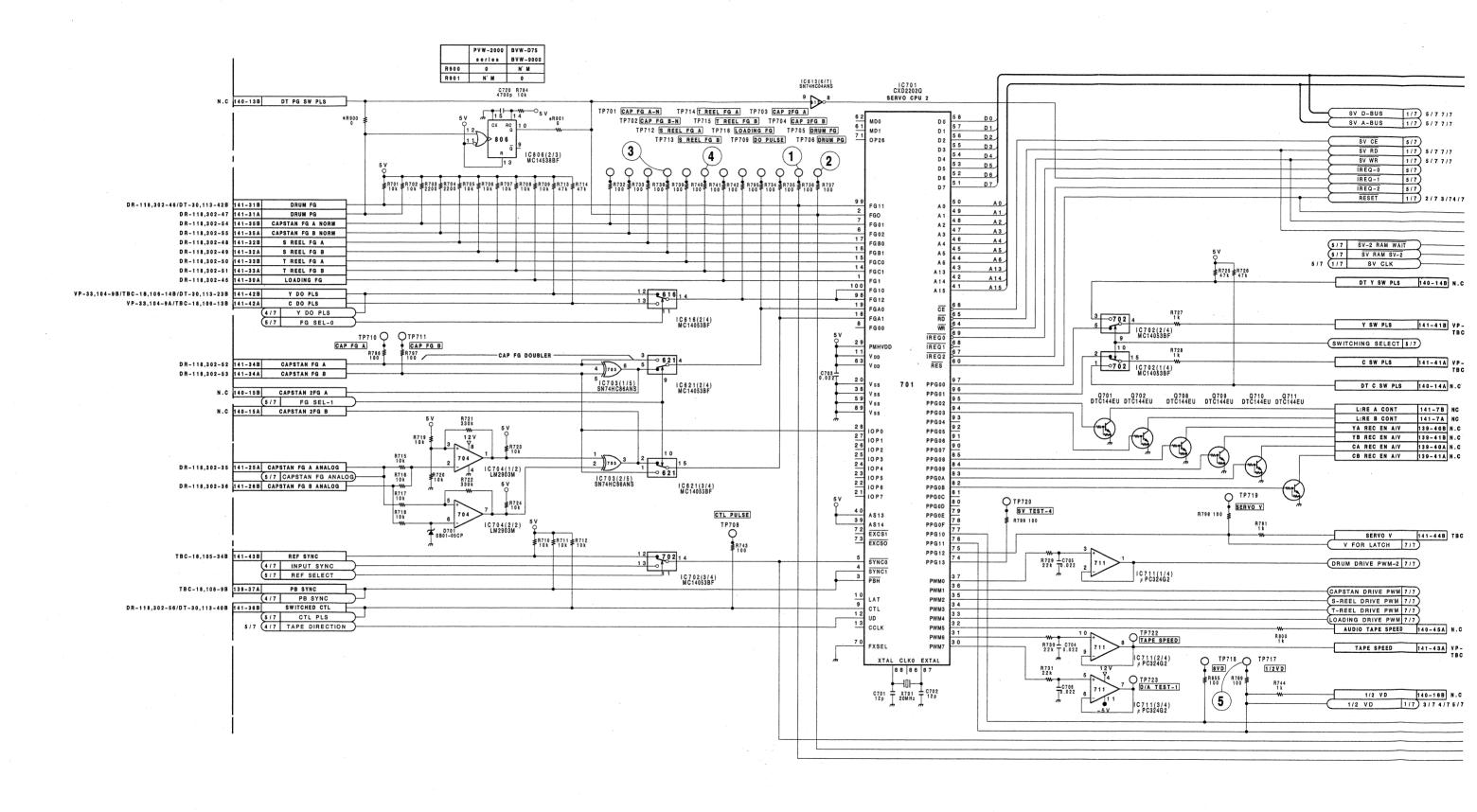
BOARD NO.1-640-029-12 PVW-2650P(EK);#10001-10495

16-107(a)

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### SS-48P(6/7); SERVO SYSTEM MAIN



16-107(b) E

A

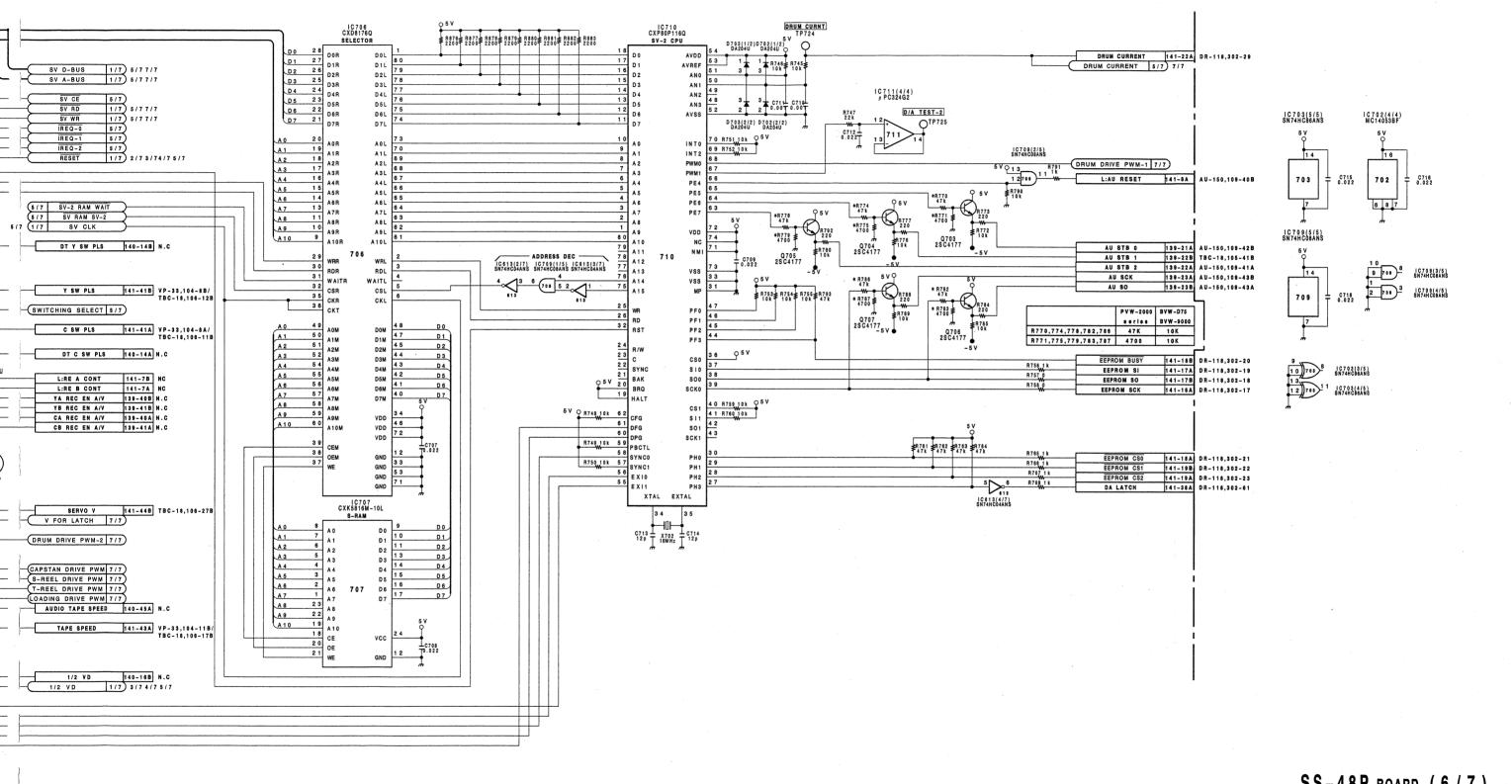
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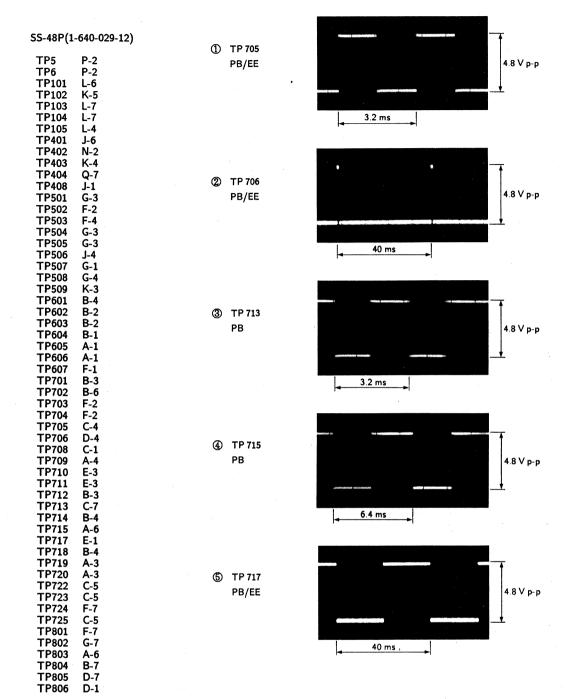


SS-48P BOARD (6/7)

BOARD NO.1-640-029-13 PVW-2650P ;#10496-

16-107(b)

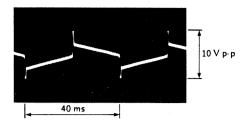
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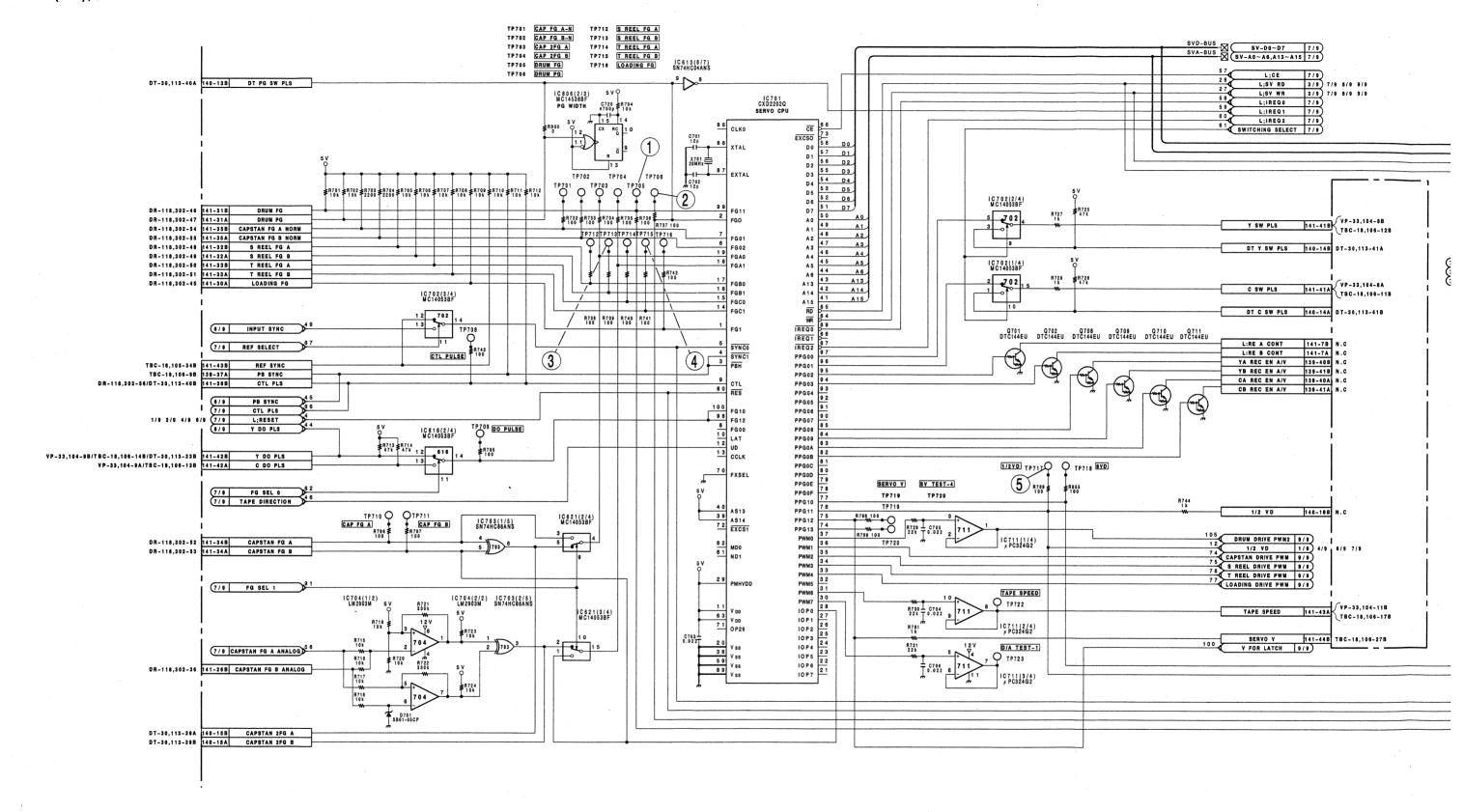
### SS-48P(1-640-029-13)

55-48P(1	-640-029-1
TP5 TP6 TP101 TP102 TP103 TP104 TP105 TP401 TP403 TP404 TP505 TP506 TP507 TP508 TP506 TP507 TP508 TP506 TP507 TP508 TP507 TP508 TP507 TP606 TP607 TP701 TP702 TP703 TP704 TP705 TP706 TP701 TP702 TP703 TP704 TP705 TP706 TP707 TP707 TP708 TP708 TP709 TP710 TP711 TP712 TP713 TP714 TP715 TP716 TP717 TP718 TP719 TP712 TP713 TP714 TP715 TP716 TP717 TP718 TP719 TP720 TP803 TP804 TP805 TP806	RRKLL-14-14-61-32-4-33-4-14-3-4-11-3-62-2-4-4-1-4-3-3-7-4-6-11-4-3-3-5-7-7-6-7-7-1-2-2-5-7-7-4-6-1-3-2-4-3-3-4-1-1-3-6-2-2-4-4-1-4-3-3-5-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7

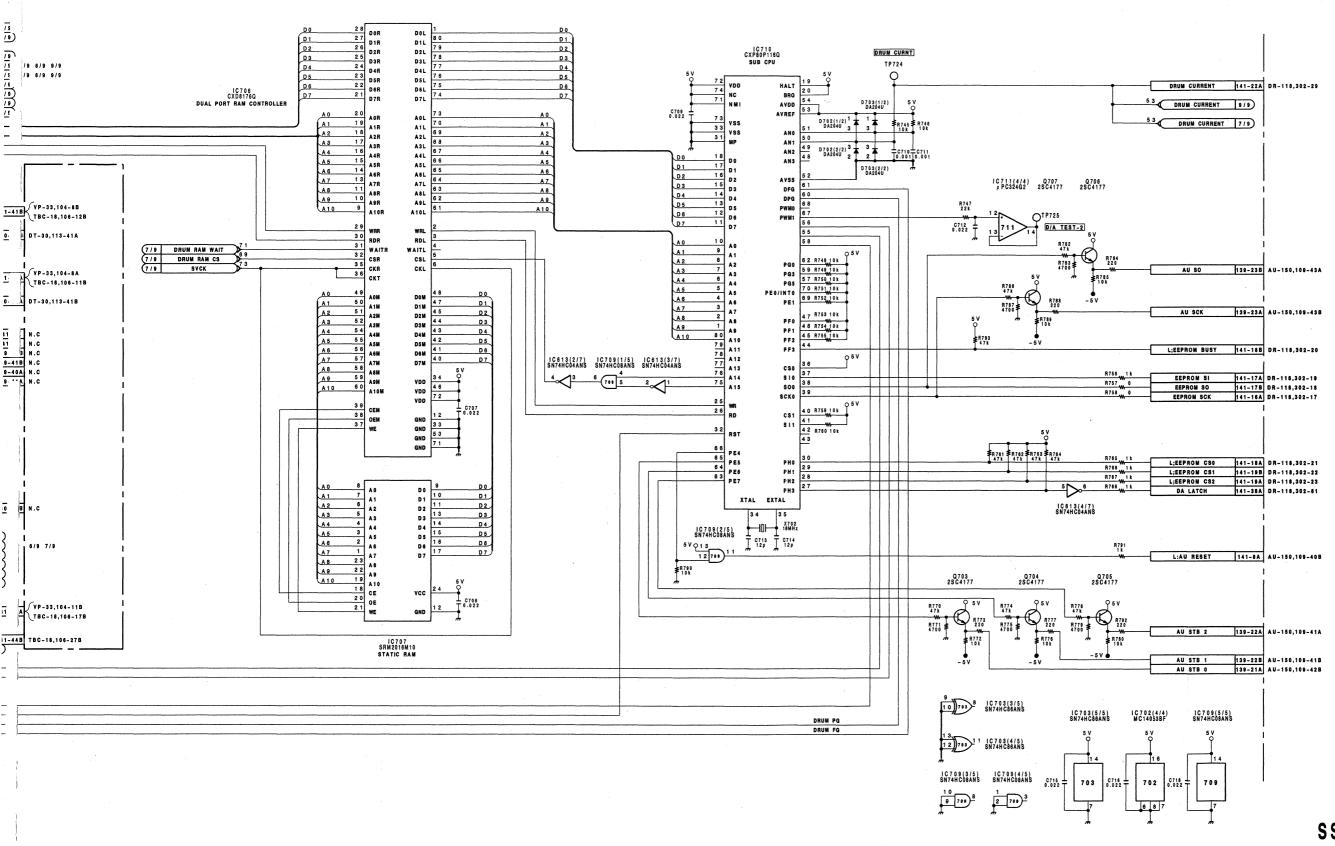
① TP 806 PB



### SS-48P(8/9); SERVO SYSTEM MAIN



16-111(a) B C D E F G H



SS-48P BOARD (8/9)

BOARD NO.1-640-029-12 PVW-2650P(EK);#10001-10495

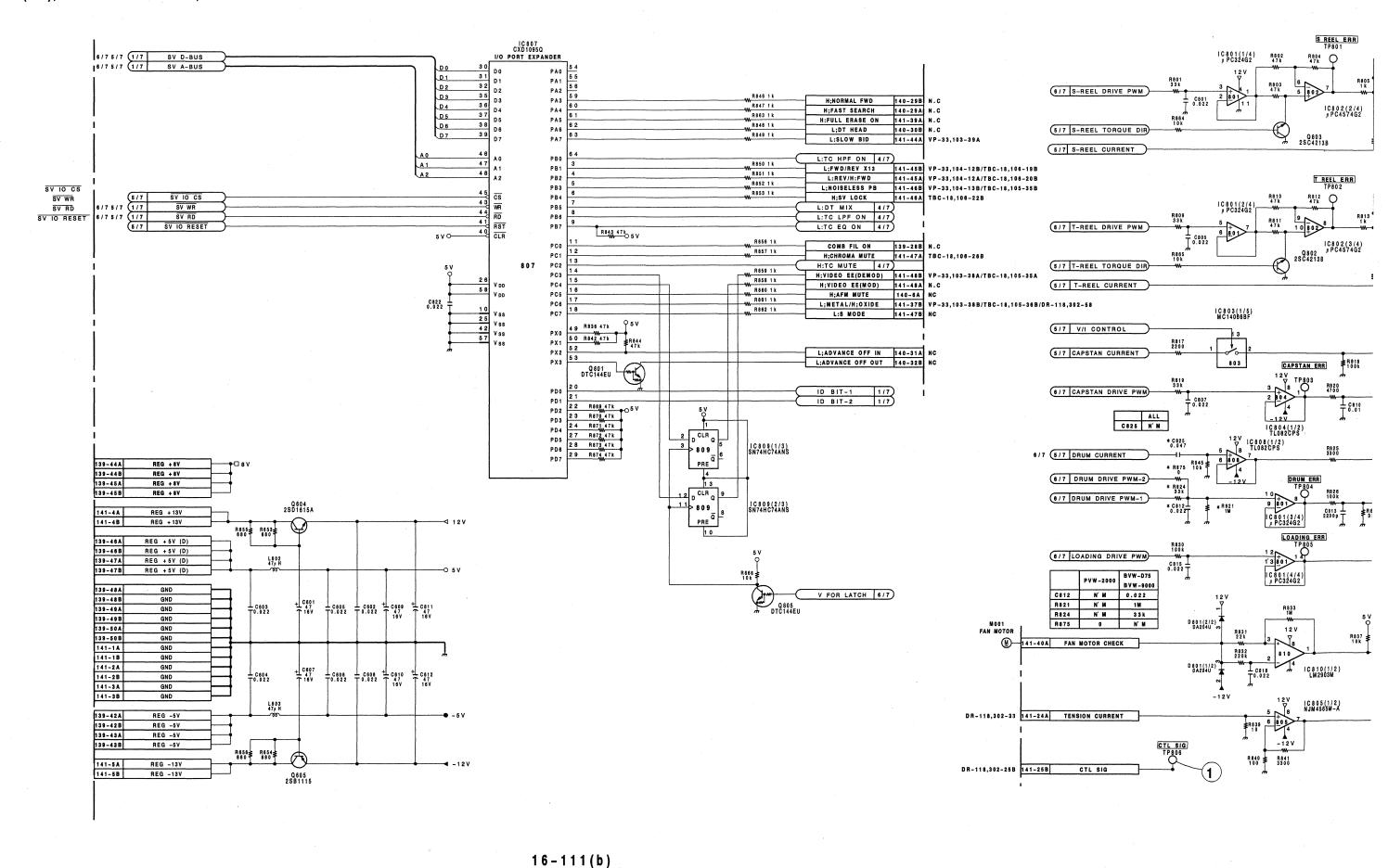
16-111(a)

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## SS-48P(7/7); MOTOR PRE DRIVER, MODE CONTROL



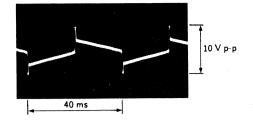
SS-48P(7/7)

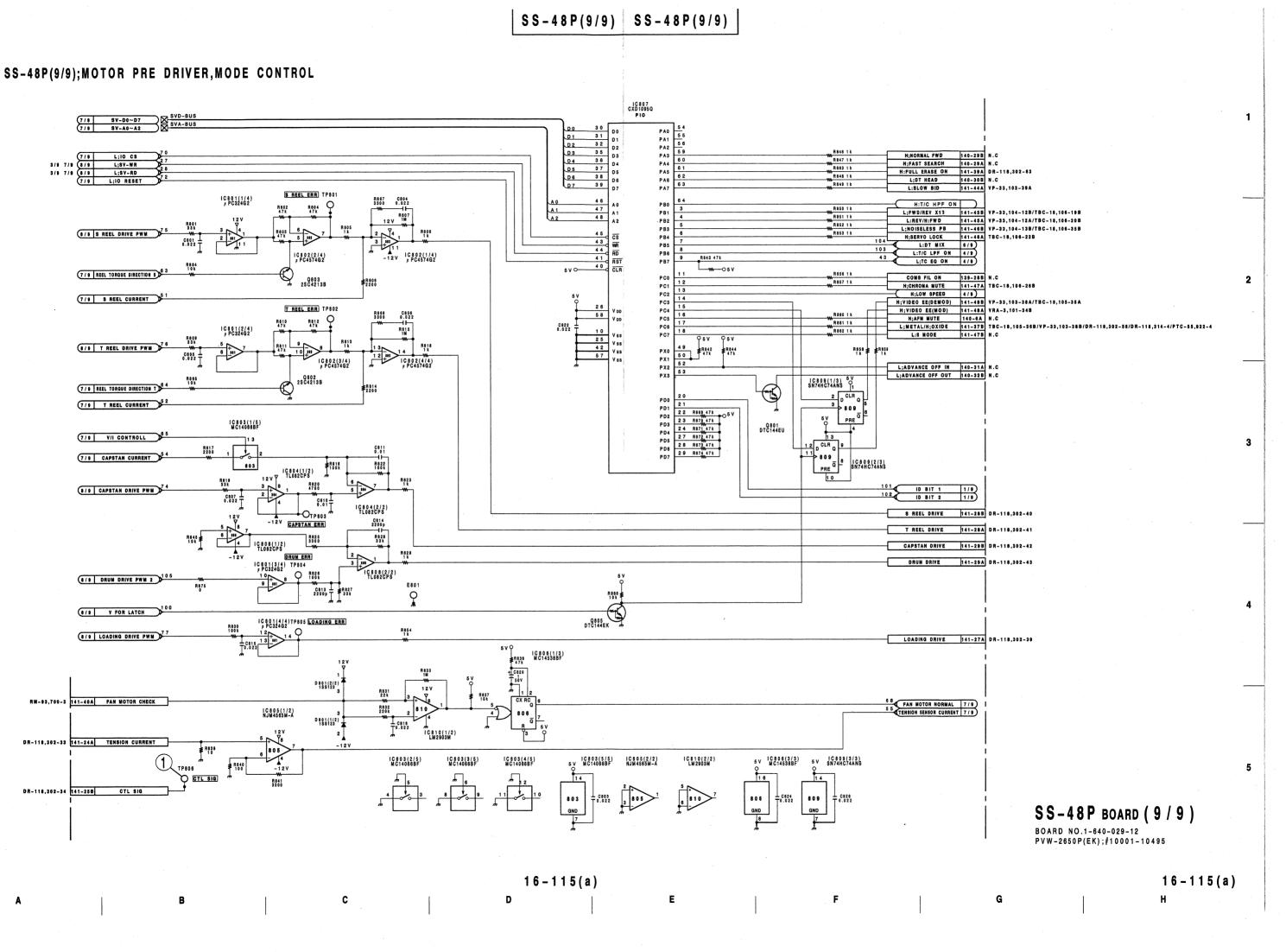
P(7/7) SS-48P(7/7)

#### SS-48P(1-640-029-12)

SS-48P(1	-640-029-:
TP5 TP6 TP101 TP102 TP103 TP104 TP105 TP401 TP402 TP403 TP404 TP408 TP501 TP502 TP503 TP504 TP505 TP506 TP506 TP507 TP508 TP509 TP601 TP602 TP603 TP604 TP605 TP606 TP507 TP701 TP702 TP701 TP702 TP701 TP702 TP703 TP704 TP705 TP706 TP701 TP702 TP701 TP702 TP703 TP704 TP705 TP706 TP707 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP707 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP702 TP703 TP704 TP705 TP706 TP708 TP709 TP701 TP701 TP711 TP712 TP713 TP714 TP715 TP717 TP718 TP717 TP718 TP717 TP718 TP717 TP718 TP719 TP720 TP723 TP724 TP725 TP801 TP803 TP804 TP805 TP806	P-P-L-K-L-L-J-N-K-Q-J-G-F-F-G-G-J-G-G-K-B-B-B-B-R-R-B-B-R-B-B-B-B-B-B-B-B-B-B

① TP 806 PB





7 / 9 SV-D0~D7
7 / 9 SV-A0~A2 SVA-BUS

8/9 L;SV-WR 3/9 7/9 8/9 L;SY-RD 7/9 L;IO RESET

8/9 S REEL DRIVE PWM

7 / 9 REEL TORQUE DIRECTION 3

7/9 S REEL CURRENT

8/9 T REEL DRIVE PWM

7/9 REEL TORQUE DIRECTION T 7/9 T REEL CURRENT

7/9 V/I CONTROLL

7/9 CAPSTAN CURRENT

8/9 CAPSTAN DRIVE PWM

8/9 DRUM DRIVE PWM 2

8/9 V FOR LATCH

8/9 LOADING DRIVE PWM

(1) TP808

CTL SIG

RM-93,700-3 141-40A FAN MOTOR CHECK

DR-118,302-33 141-24A TENSION CURRENT

DR-118,302-34 141-25B

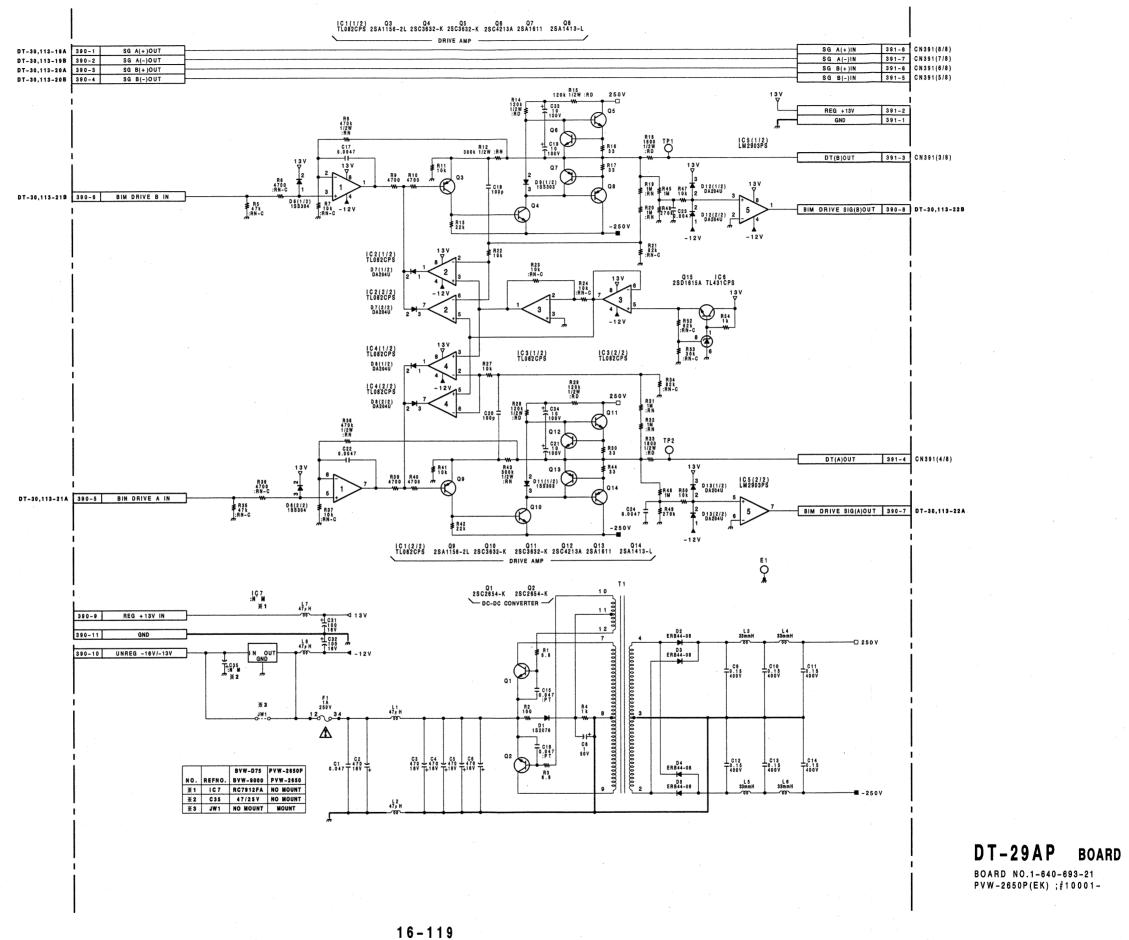
C805 T

R817 2200

DT-29AP(1-640-693-21)

TP1 A-21 TP2 A-23

### DT-29AP; DYNAMIC TRACKING



16-119

2

10-1

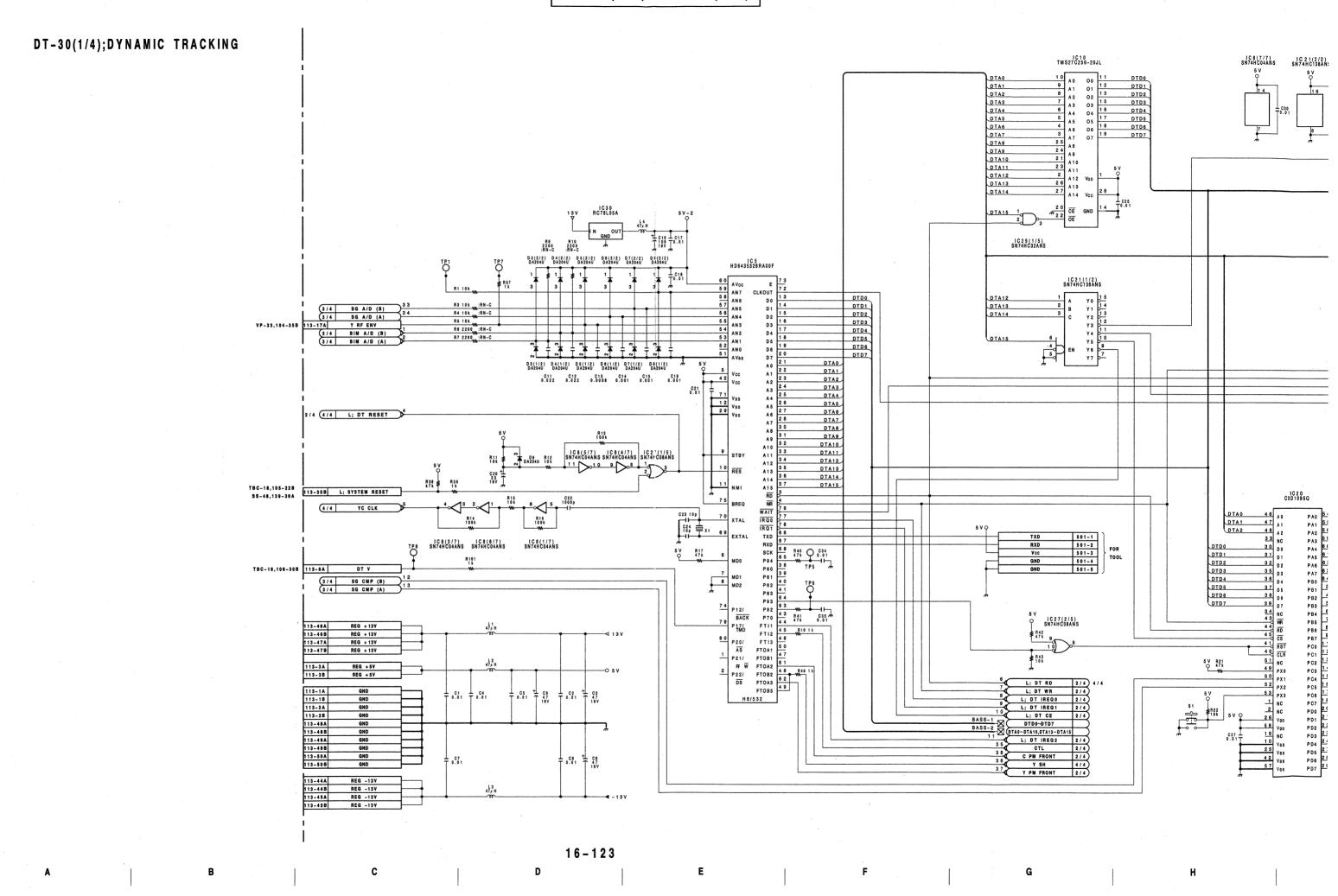
Ε

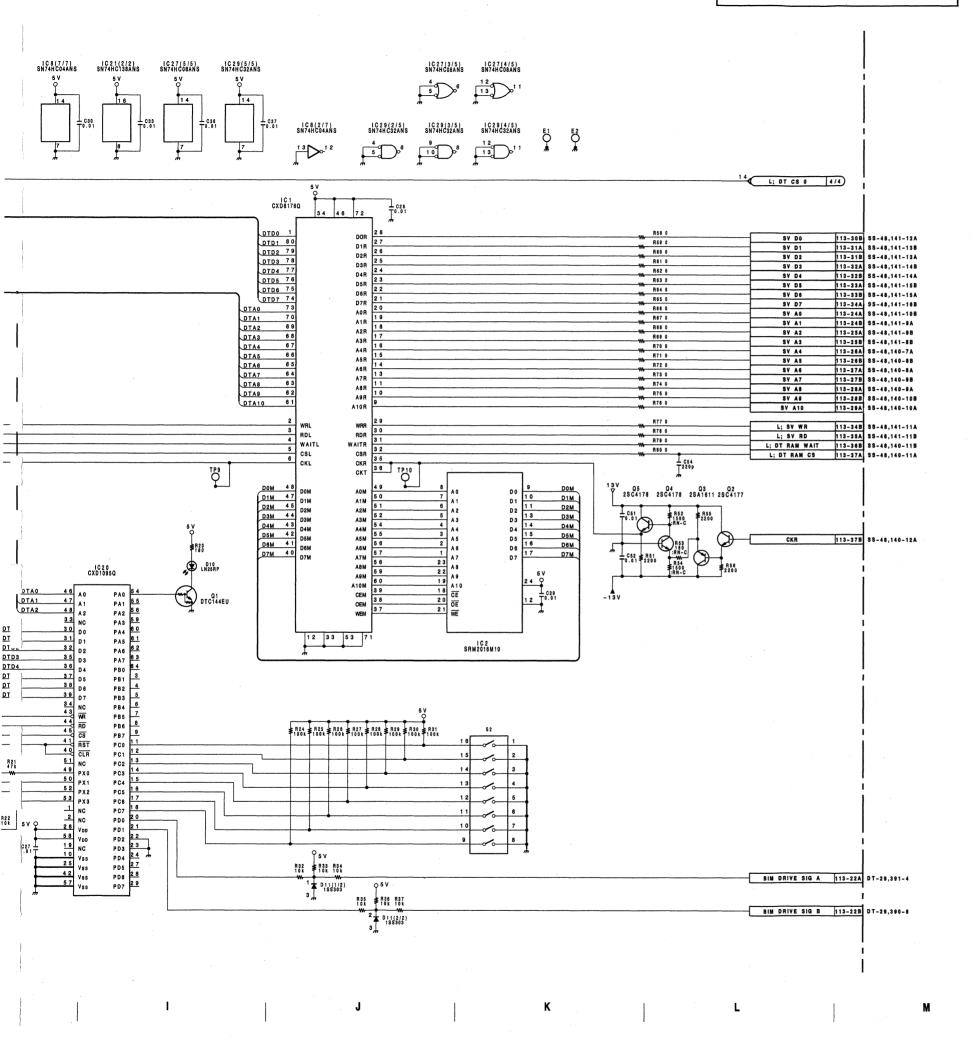
F

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### DT-30(1-642-567-11)

TP1	C-1
TP5	C-1
TP6	C-1
TP7	G-1
TP8	G-2
TP9	B-5
TP10	C-6
TP101	A-6
TP102	A-7
TP103	A-6
TP104	A-6
TP105	G-1
TP106	C-5
TP107	B-6
TP108	D-5
TP109	D-4
TP201	F-1
TP203	F-5
TP204	F-1
TP205	F-1
TP207	E-5
<b>TP208</b>	F-1
TP301	G-1
TP302	F-5
TP304	G-2





DT-30 BOARD (1/4)

BOARD NO.1-642-567-11 PVW-2650P(EK);#10001-

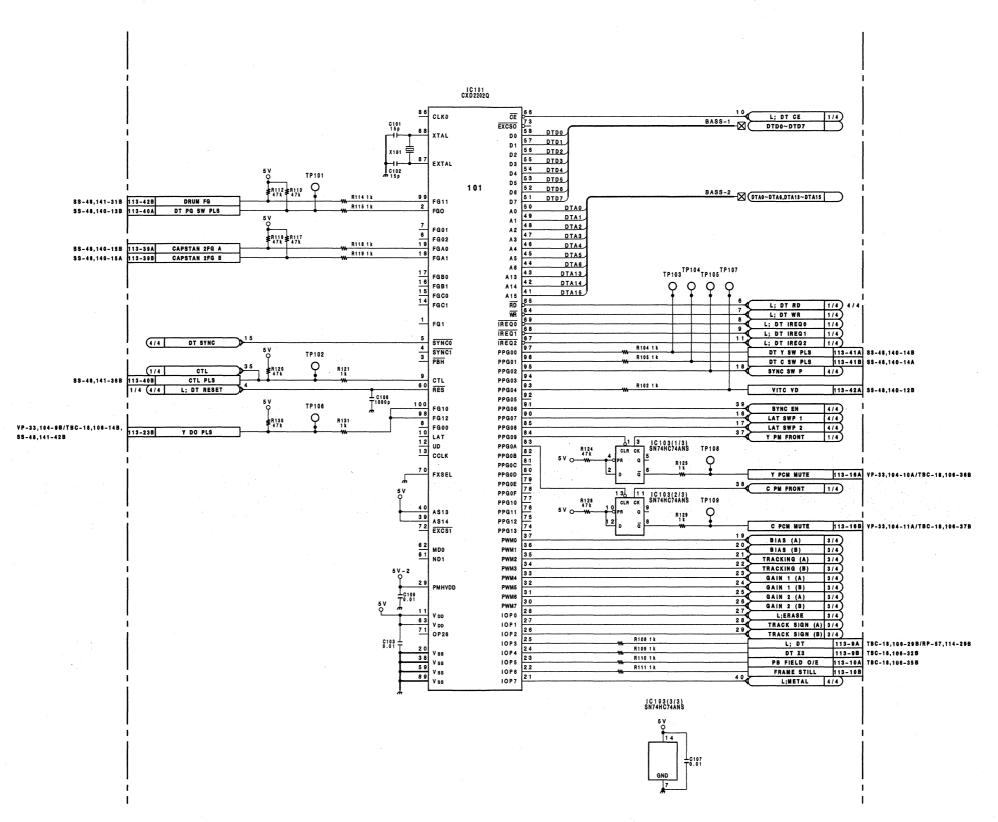
0

16-123

#### DT-30(1-642-567-11)

TP1 C-1
TP5 C-1
TP6 C-1
TP7 G-1
TP8 G-2
TP9 G-5
TP10 C-6
TP101 A-6
TP102 A-7
TP103 A-6
TP104 A-6
TP105 G-1
TP106 C-5
TP107 B-6
TP108 D-5
TP109 D-4
TP203 F-5
TP204 F-1
TP203 F-5
TP204 F-1
TP205 F-1
TP207 E-5
TP208 F-1
TP208 F-1
TP302 G-1
TP302 G-2

## DT-30(2/4); DYNAMIC TRACKING



DT-30 BOARD (2/4)

BOARD NO.1-642-567-11 PVW-2650P(EK);#10001-

16-127

16-127

C

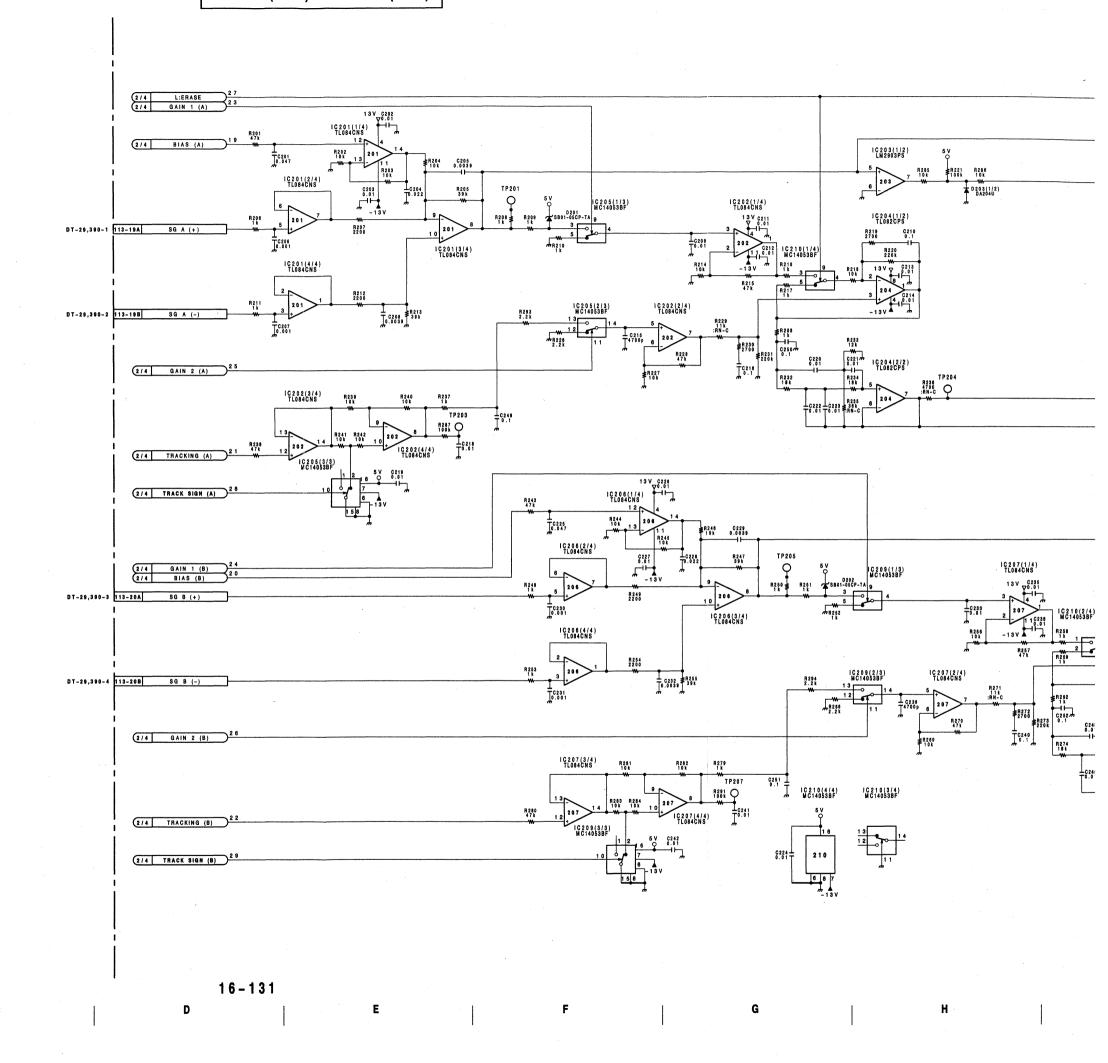
.

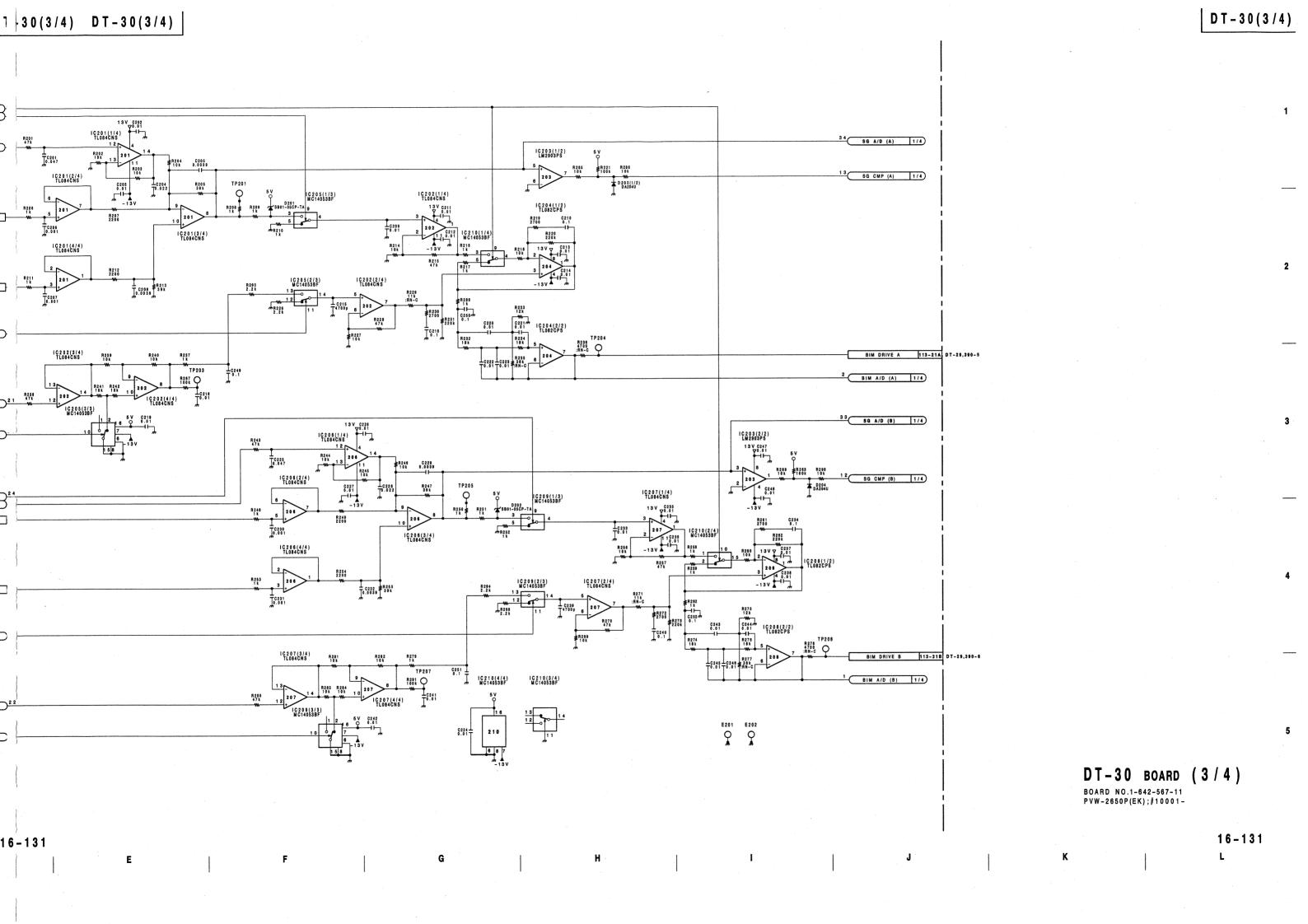
E

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### DT-30(1-642-567-11)

TP1 C-1
TP5 C-1
TP6 C-1
TP7 G-1
TP8 G-2
TP9 B-5
TP10 C-6
TP101 A-6
TP102 A-7
TP103 A-6
TP104 A-6
TP104 C-5
TP106 C-5
TP107 B-6
TP108 D-5
TP109 D-4
TP203 F-5
TP204 F-1
TP203 F-5
TP204 F-1
TP205 F-1
TP207 E-5
TP208 F-1
TP208 F-1
TP301 G-1
TP302 F-5
TP304 G-2

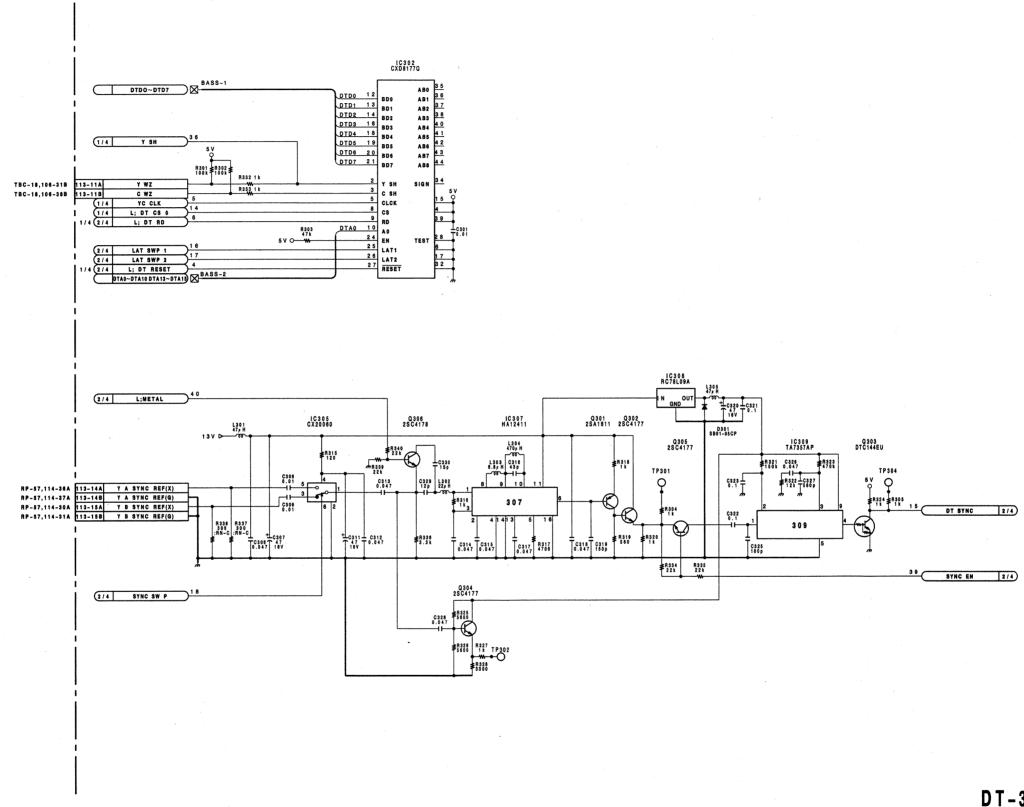




#### DT-30(1-642-567-11)

TP1	C-1
TP5	C-1
TP6	C-1
TP7	G-1
TP8	G-2
TP9	B-5
TP10	C-6
TP101	A-6
TP102	A-7
TP103	A-6
TP104	A-6
TP105	G-1
TP106	C-5
TP107	B-6
TP107	D-5
TP109	D-4
TP201	F-1
TP203	F-5
TP204	F-1
TP205	F-1
TP207	E-5
TP208	F-1
TP301	G-1
TP302	F-5
TP304	G-2

# DT-30(4/4); DYNAMIC TRACKING



DT-30 BOARD (4/4)

BOARD NO.1-642-567-11 PVW-2650P(EK);#10001-

16-135

16-135

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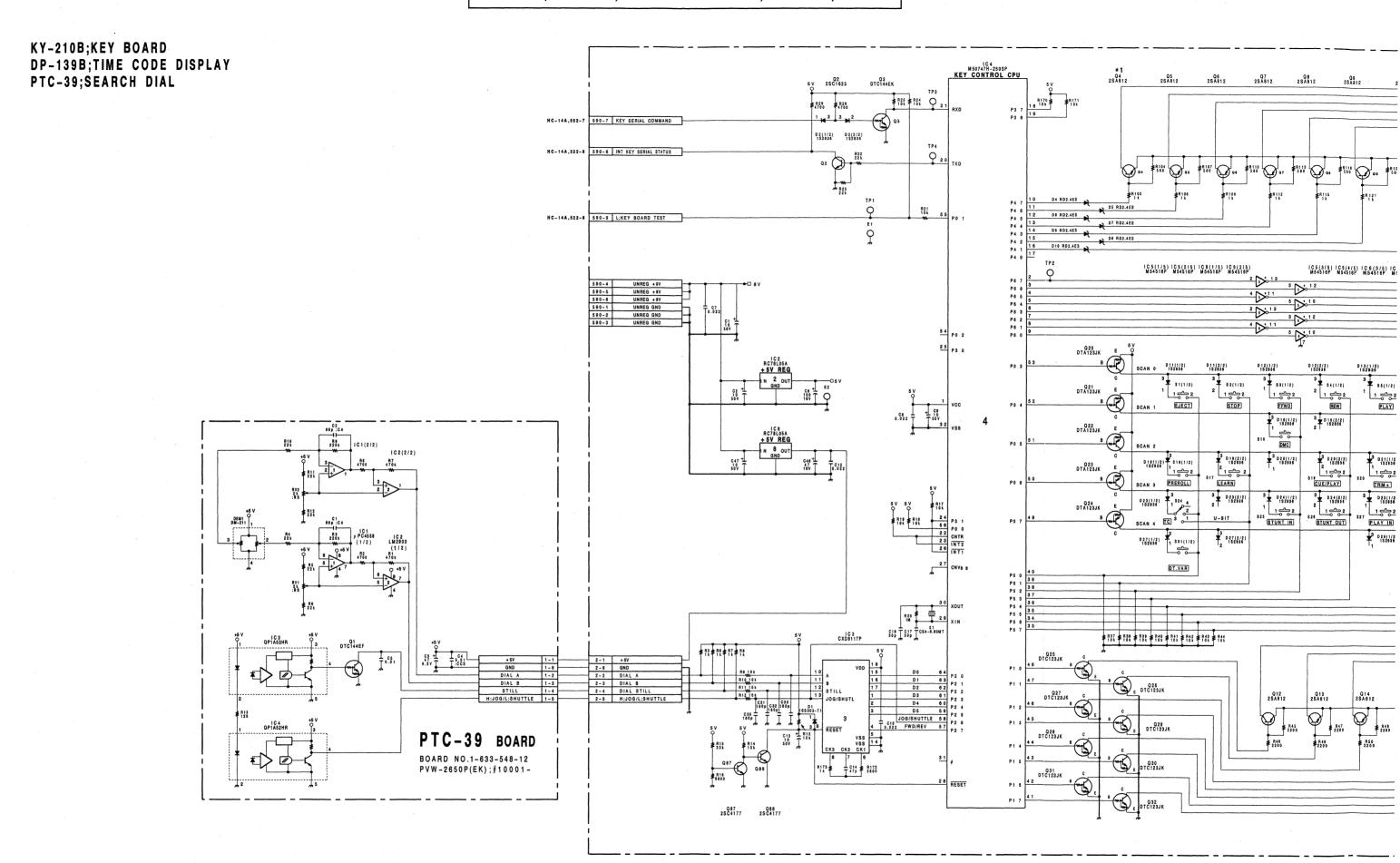
G

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### KY-210B(1-640-050-31)

TP1	E-1
TP2	H-3
TP3	E-1
TP4	E-1



16-139

В

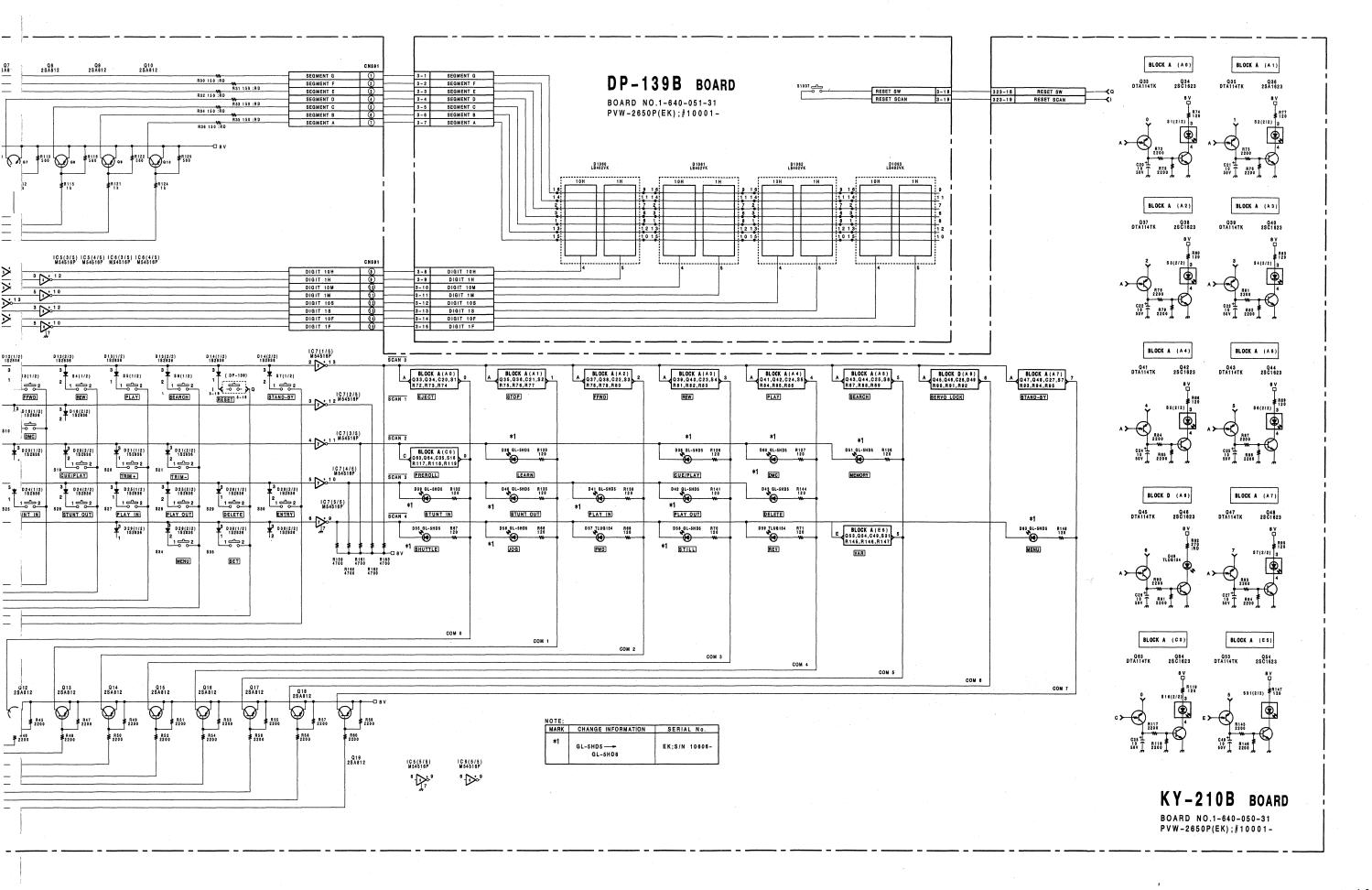
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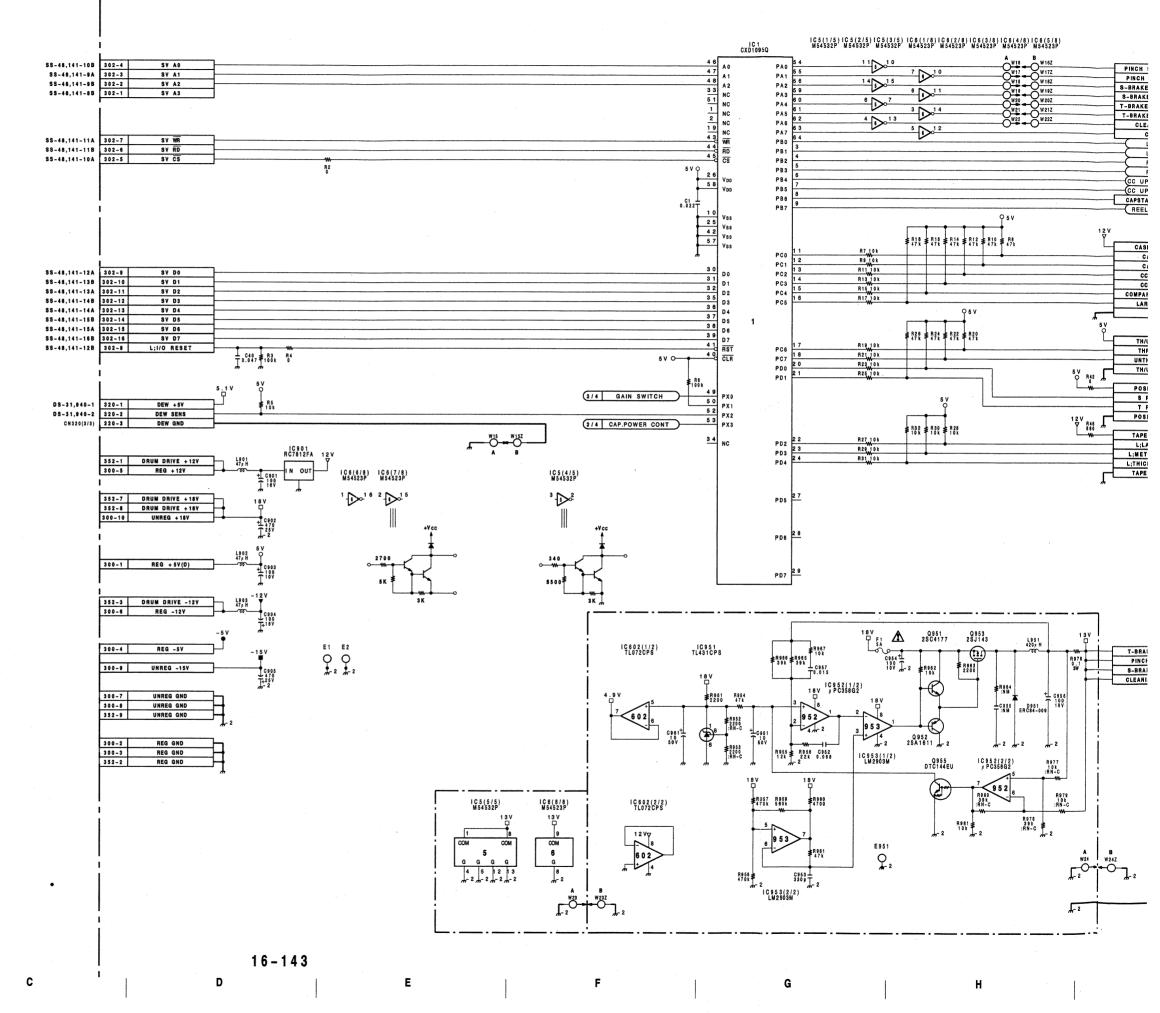


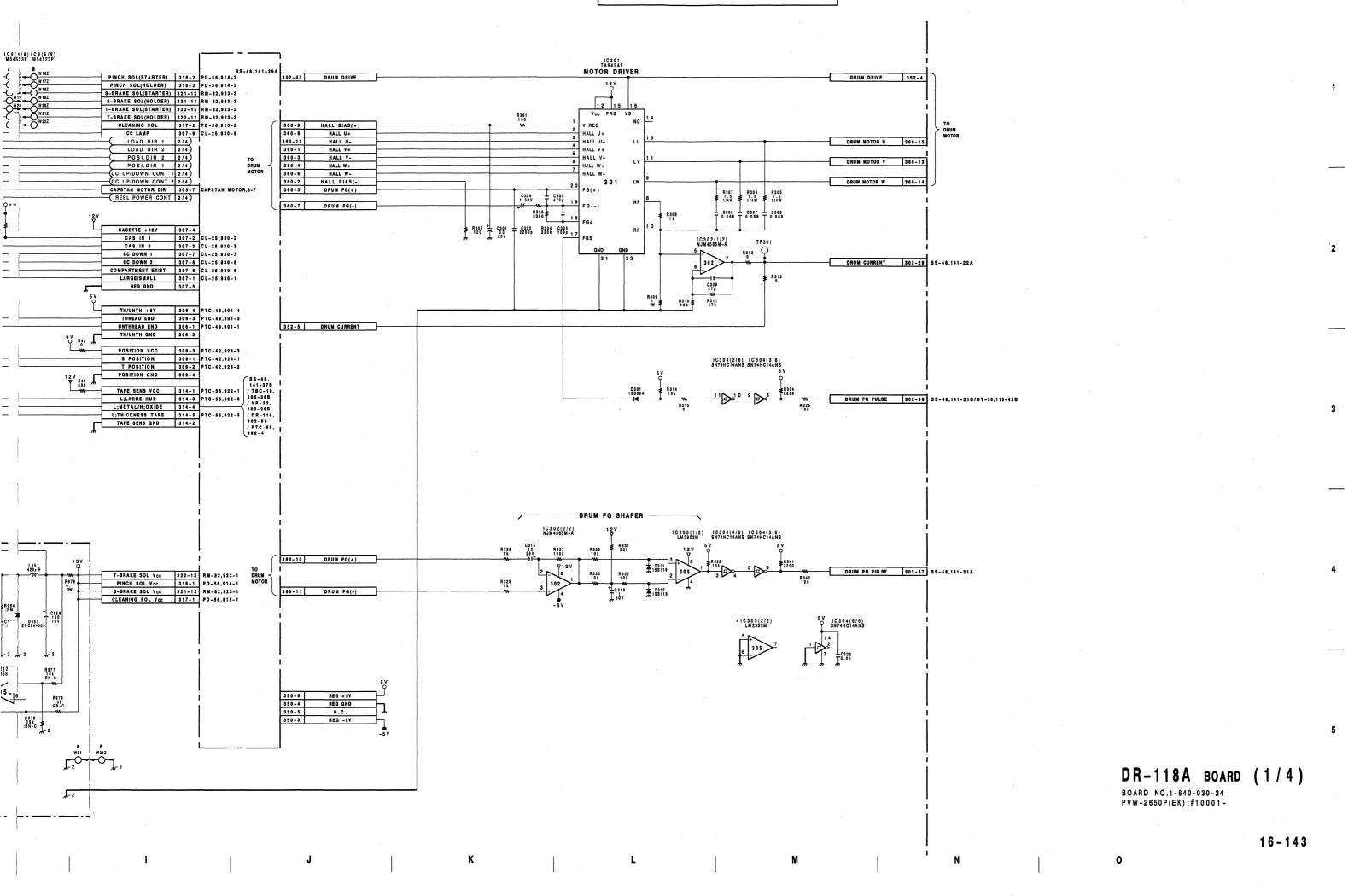
16-139

### DR-118A(1-640-035-24)

TP151 K-5 TP201 G-2 TP202 F-2 TP301 B-4 TP501 C-2 TP601 B-6 TP651 B-6

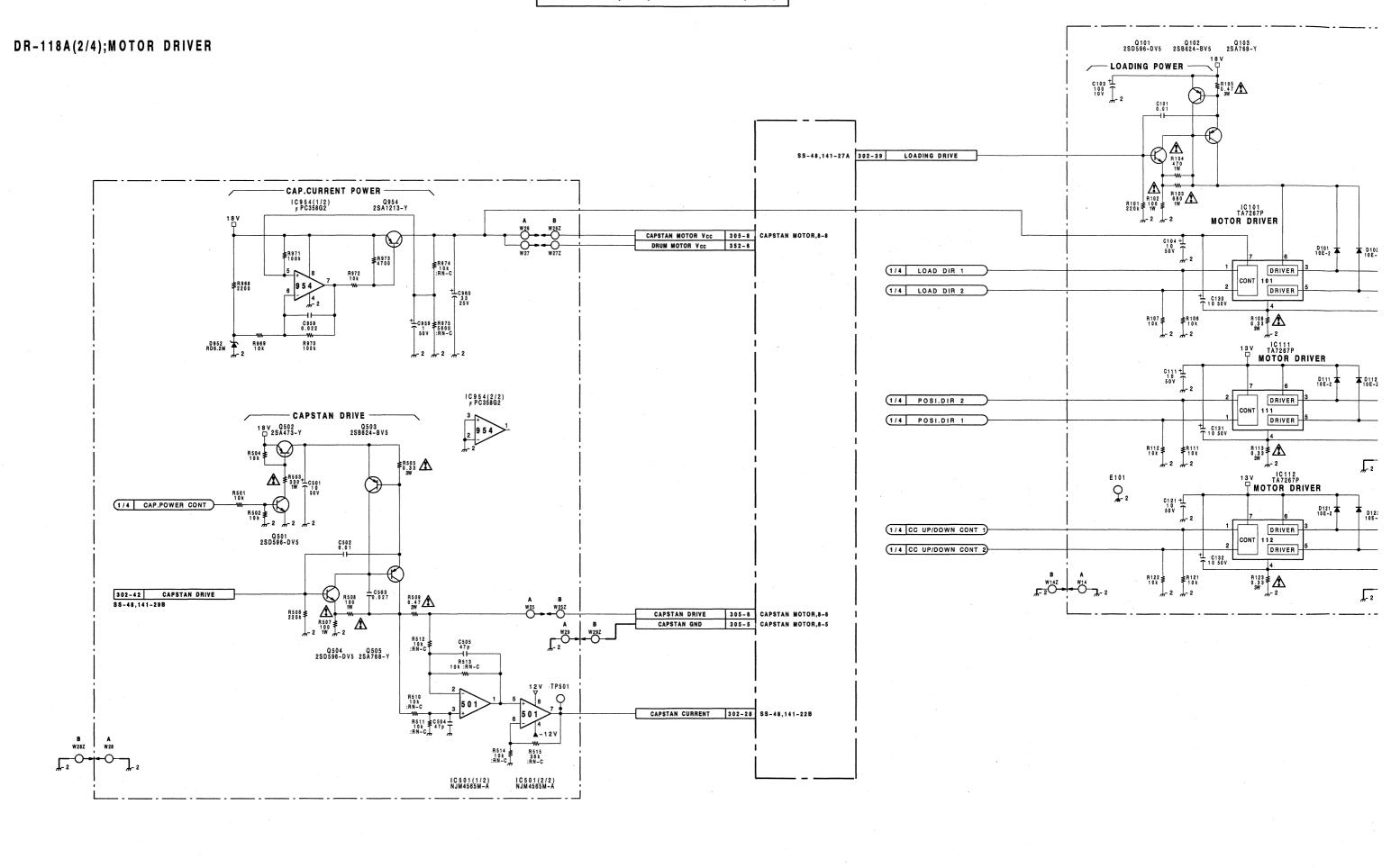
# DR-118A(1/4); MOTOR DRIVER, SOLENOID DRIVER



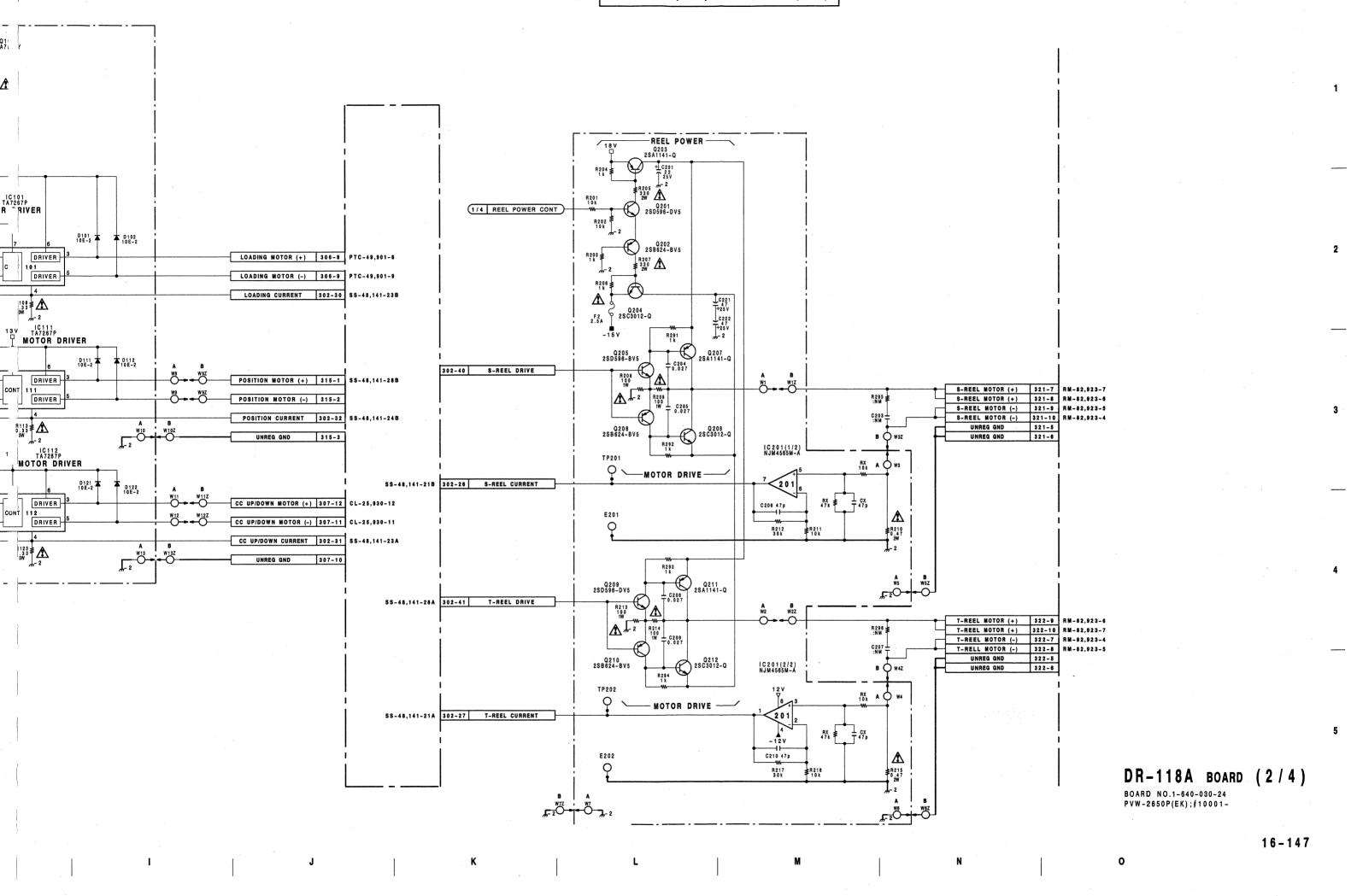


### DR-118A(1-640-035-24)

TP151 K-5 TP201 G-2 TP202 F-2 TP301 B-4 TP501 C-2 TP601 B-6 TP651 B-6

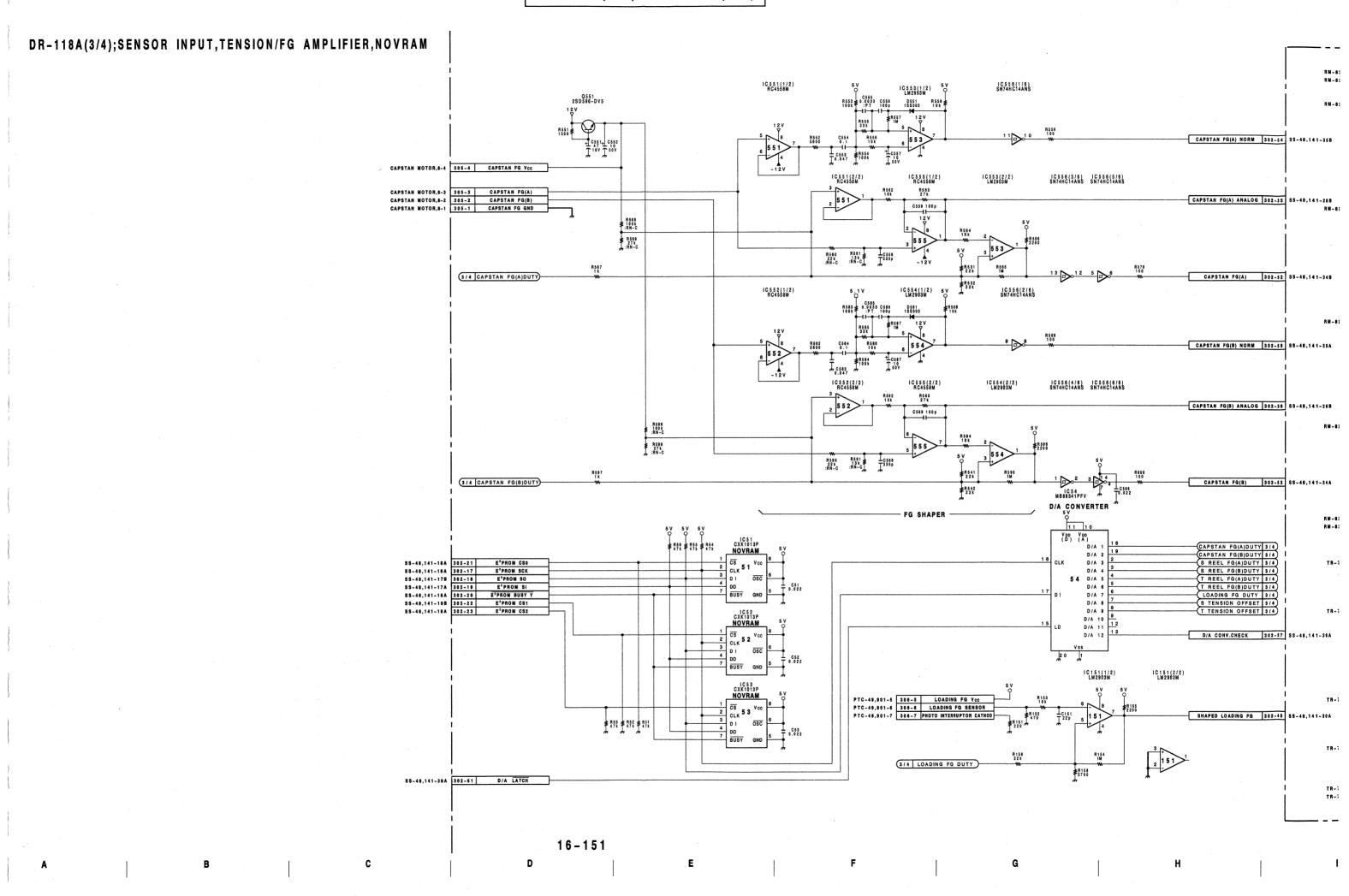


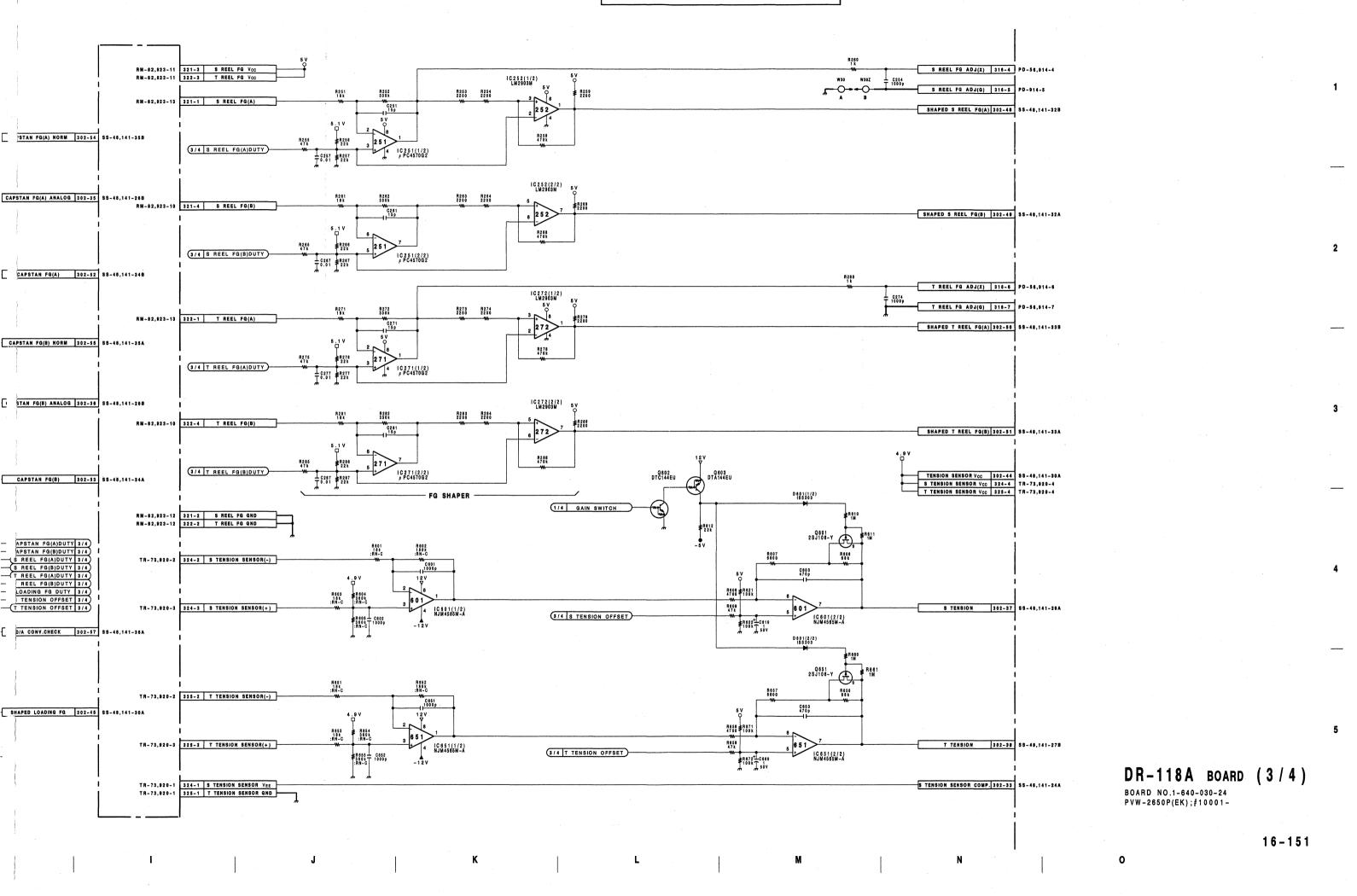
16-147 A B C D E F G H



### DR-118A(1-640-035-24)

TP151 K-5
TP201 G-2
TP202 F-2
TP301 B-4
TP501 C-2
TP601 B-6
TP651 B-6

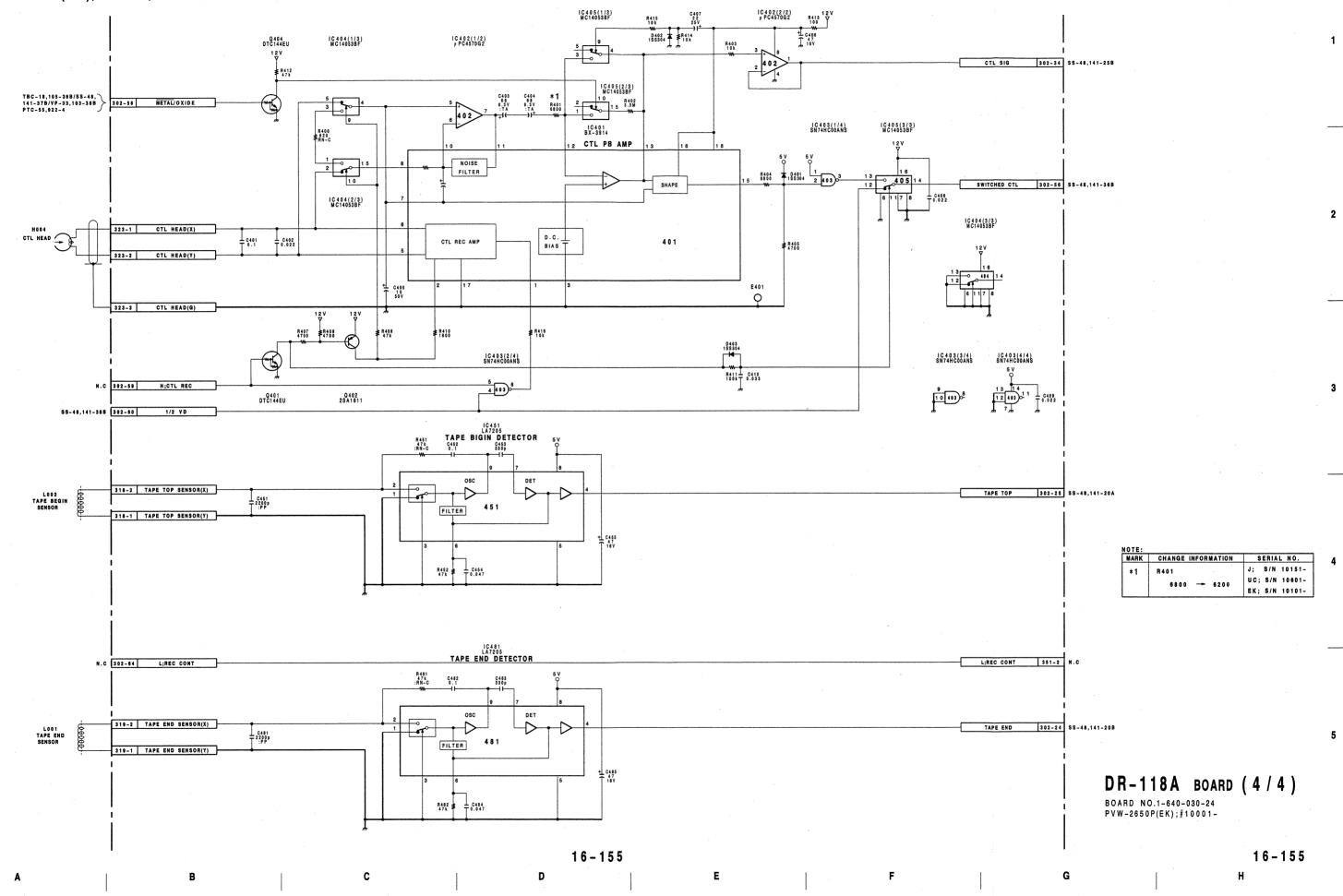




### DR-118A(1-640-035-24)

TP151 K-5 TP201 G-2 TP202 F-2 TP301 B-4 TP501 C-2 TP601 B-6 TP651 B-6

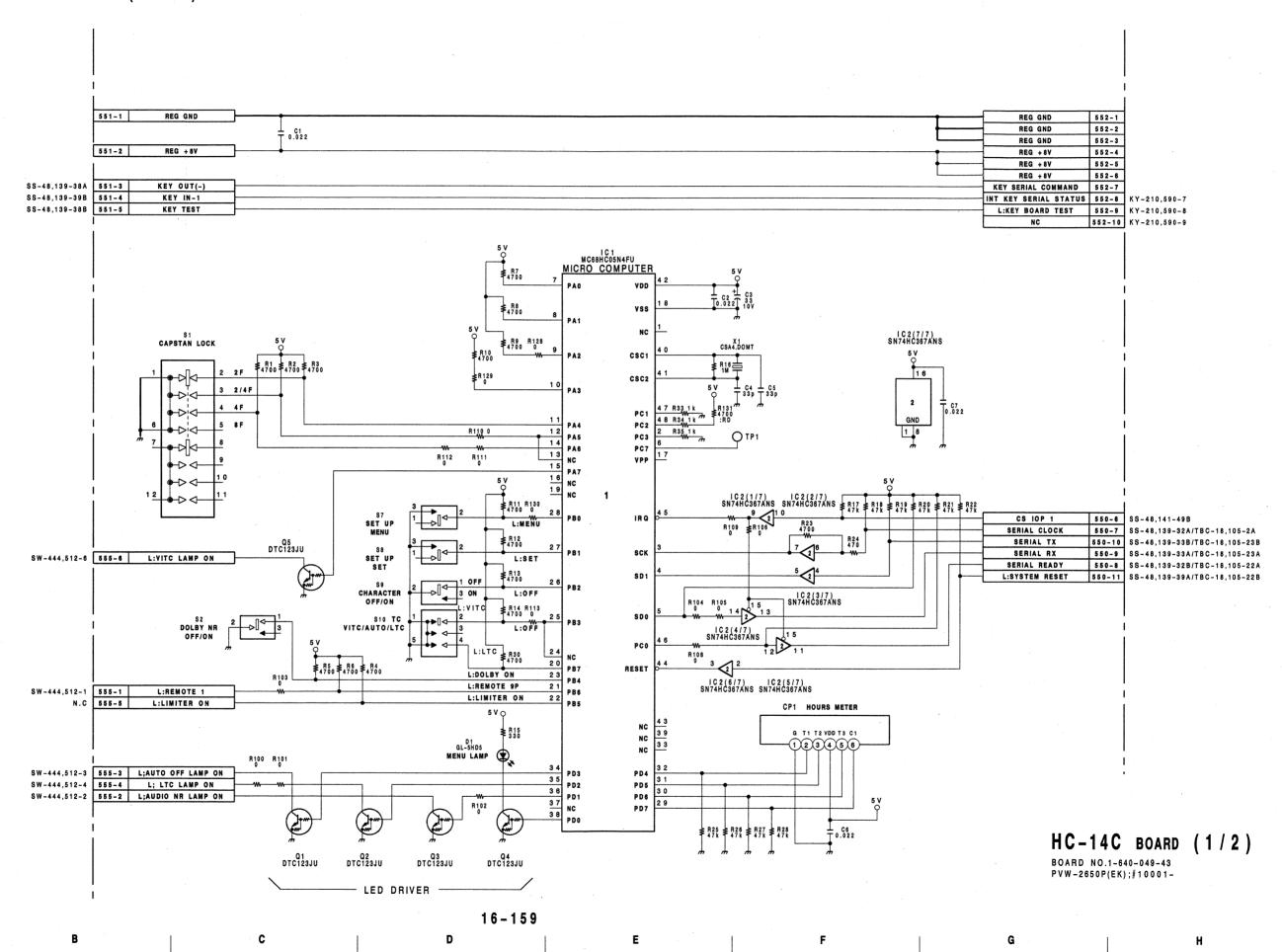
# DR-118A(4/4);LTC PB,TAPE TOP/END SENSOR



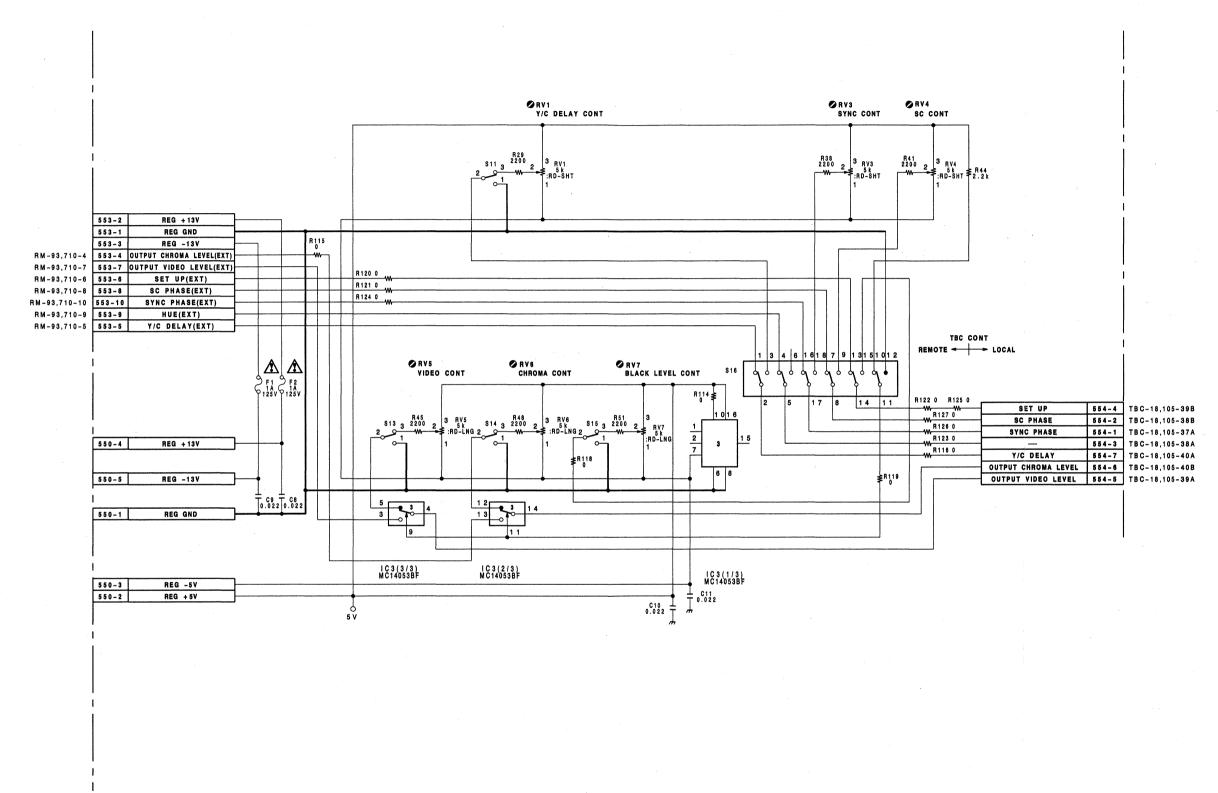
HC-14C(1-640-049-43)

TP1 D-2

## HC-14C(1/2); SUB-CONTROL PANEL (SWITCH)



# HC-14C(2/2);SUB-CONTROL PANEL(TBC CONTROL)



HC-14C BOARD (2/2)

BOARD NO.1-640-049-43 PVW-2650P(EK);#10001-

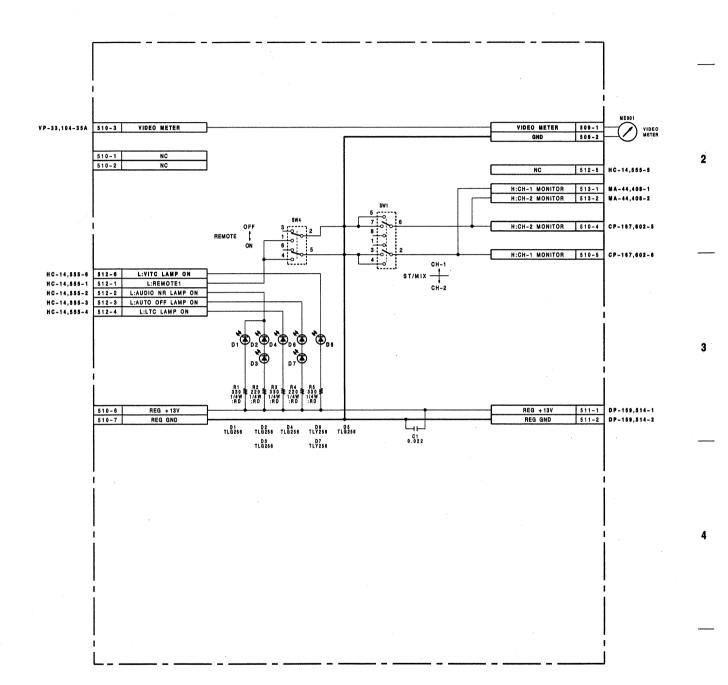
16-159

-1 05-2A

-18,105-23B

-18,105-23A -1 05-22A -1 05-22B

# SW-444B; SELECT SWITCH, INDICATOR, RF/VIDEO LEVEL METER



SW-444B BOARD

BOARD NO.1-640-043-31 PVW-2650P(EK);#10001-

16-161

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MB-322B(1/5);MOTHER BOARD

		/				V F	-33BP									
		VP-33A	( CN103		1					( CN104	<del></del>	<u> </u>				
1		A REG GND	1	B REG GND	105-1 • 2	- <u></u>	1		A REG GND	1	B REG GND	106-1 • 2 • 3				
۵	-	REG GND	2	REG GND	105-1 • 2	+	* 3		REG GND	2	REG GND	106-1 - 2 - 3		208>	104-37B	YA PB R
° 134≯ 135⊁		CF ID REGEN	3 4		105-10A 105-11A	<b>√</b> 1 6 0 <b>√</b> 1 6 1	13V-2		REG GND REG + 13V	3 4	REG GND REG +13V	106-1 · 2 · 3		207>	104-36B 104-40B	YA PB RI YB PB R
136>	139-30B	VO 1st FIELD	5	HD	105-12B,139-35B	<b>-</b> 1 6 2			REG -13V	5	REG -13V	106-5	— <b>■</b> -13V	209>	104-39B	YB PB RI
137 <b>&gt;</b> 138 <b>&gt;</b>		U FIELD PULSE CHARA SIG	7		105-12A 105-13A	√1 6 3 √1 6 4	-137		NC NC	7	NC L;NO SIG	106-8B,140-50A	<b>-(</b> 193	202>	104-19B 104-18B	CA PB RE
139>		CHARA FRAME	8	VISC REGEN	105-14A	<b>-</b> 1 6 5	187>	106-11B,141-41A	C SW PLS	8	Y SW PLS	106-12B,141-41B	<b>&lt;</b> 1 9 4	200>	104-16B	CB PB R
140>	105-17A	NC VO FIELD O/E	10		105-15A 105-16A	— <b>≺</b> 166 <b>≺</b> 167 ∞	188	106-13B,141-42A 113-16A,106-36B	C DO PLS Y PCM MUTE	10	Y DO PLS TBC SPEED	106-14B,141-42B,113-231 106-16B	41 9 5 - <b>4</b> 1 9 6	199>	104-15B	CB PB RF
3		GND	11	GND		107 8	190>-	113-16B,106-37B	C PCM MUTE	11	TAPE SPEED	106-17B,141-43A	<b>4</b> 197			NC NC
° 141≯ 142⊁				OUTPUT U-DUB Y(X) OUTPUT U-DUB C(X)		√1 68 √1 69 ∞	191>	106-20B,141-45A	L;REV/H;FWD NC	12	L;FWD/REV X13 L;NOISE LESS PB	106-19B,141-45B 141-46B,105-35B	<b>-</b> √1 9 8 -√2 3 5			NC NC
1427	203-10	GND	14		203-9	100 %	E		NC	14	NC	141-465,105-355	7.,,	L		NU
° 143 <b>≻</b> 144 <b>≻</b>			15		203-13	<b>-(</b> 170 <b>-(</b> 171			NC NC	15	CB PB RF(G)	150-8 150-7	<b>4</b> 199 <b>4</b> 200			
145>					203-3	172	F		NC NC	17	CB PB RF(X)	150-7				
146>	203-2				203-1	<b>-(</b> 1 7 3	. [		NC	18	CA PB RF(G)	150-6	€201			
147>	202-2	NC OUTPUT S-VIDEO Y(G	19		) 202-1	<b>-</b> (174	-		NC NC	19	CA PB RF(X)	105-5	₹202			
148>	202-6	OUTPUT Y(G)	21	OUTPUT Y(X)	202-5	<b>-</b> 1 7 5	-		NC	21	NC					
149 <b>&gt;</b> 150 <b>&gt;</b>		OUTPUT R-Y(G) OUTPUT B-Y(G)	22		202-7		-		NC NC	22	NC NC		1			
₹		GND	2 4	GND		<del>[</del>			NC	2 4	NC	-	]			
° 151 <b>&gt;</b> −	202-4	OUTPUT S-VIDEO C(6	26	OUTPUT S-VIDEO C(X)	202-3	<b>-</b> √178	}		NC NC	2 5	NC NC		-			
		NC	27	NC			. [		NC	27	NC		_			
152>	105-25A	REF C(G)	28		105-25B	<b></b> (179	-		NC NC	28	DEMOD Y(X)	106-42B	<b>4</b> 203			
153>		U AXIS SC(G)	3 0	U AXIS SC(X)	105-27B	<b>-</b> (180			NC	30	DEMOD Y(G)	106-43B	₹204			
154>	105-28A	V AXIS SC(G)	31		105-288	<b>─√</b> 181			NC NC	31	NC DEMOD C(X)	106-498	€205			
155>	105-30A	TBC' d R-Y(G)	33		105-30B	<b>-</b> 1 8 2	. [		NC	33	DEMOD C(G)	106-47B	₹206			
156>		TBC' d B-Y(G)	34		105-31B	- <b>√</b> 1 83 - <b>√</b> 1 84			NC VIDEO METER	3 4	NC NC		7			
157>	103-324	TBC' d Y(G)	3 5		105-32B		192>	224-3	NC NC	36	Y RF ENV YA PB RF(G)	113-17A 150-2	₹207			
		NC	37				[		NC	37	YA PB RF(X)	150-1	<b></b>			
158 <b>&gt;</b> - 159 <b>&gt;</b> -		H; VIDEO EE(DEMOD) L; SLOW BID	38		141-37B,105-36B,262-5	185			NC NC	38	YB PB RF(G)	150-4	<b>4</b> 209			
		NC	40	NC			. [		NC	40	YB PB RF(X)	150-3	€210			
-5 V - 2 ●	_	NC REG -5V	41		105-42 · 43		-		NC NC	41	NC NC	-	-			
-5V-2 ●		REG -5V	43	REG -5V	105-42 - 43	-5V-2			NC	4.3	NC		1			
8 V □		REG +8V	44		105-44 · 45 105-44 · 45	—□8 V —□8 V	-		NC NC	44	NC NC		-			
5 V O-		REG +5V	4.6	REG +5V	105-46 • 47	05 V			NC	4 6	NC		1			
5 V O		REG +5V REG GND	47		105-46 • 47		, ,		NC REG GND	47	NC REG GND	106-48 - 49 - 50	-			
٠ ۽ ــــ		REG GND	49		105-48 - 49 - 50		+ + + + -		REG GND	4 9	REG GND	106-48 - 49 - 50				
- 4	1	REG GND	50	REG GND	105-48 • 49 • 50				REG GND	5 0	REG GND	106-48 • 49 • 50				
		¬ >							2						1 7 2	
	4 4 4 4 4 0 0 0 0 0 0 0 4 1 9		174	1 2 4 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	2 2 5 - 4	4 1 4 5 7 6 7	169		223	2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	277	D .	4 6 4 6 4 6 4 6 4 6 4 6 4 6 4 6 4 6 4 6	139	
	# 2 <b>~ ~ ~ ~ ~</b>	<u></u>	7,	<u> </u>	<u> </u>	YYYY	YYYYY		] 3   P P P	<u> </u>	ŸŸŸŸ	<u> </u>	ζ	* **	<u> </u>	
	17B 18B 18B	- 0	8 8	2 OUTPUT S-VIDEO (14) 153-258 4 OUTPUT S-VIDEO (14) 153-258 5 OUTPUT Y (15) 153-218 6 OUTPUT Y (15) 153-218 7 OUTPUT R-Y(15) 153-228 8 OUTPUT R-Y(15) 153-228 10 OUTPUT R-Y(15) 153-228 10 OUTPUT B-Y(15) 153-228	8 8 8	10 A A A	OUTPUT U-DUB C(X) 103-138 OUTPUT U-DUB C(B) 103-13A OUTPUT U-DUB Y(X) 103-12B OUTPUT TV(X) 103-12B OUTPUT TY(X) 103-13A		0 8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4	9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	86	5		9 4	
	139-178 139-178 139-188 139-184 141-40A	4 4	03-1	000000000000000000000000000000000000000		0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		103-50 103-43 103-48	- 60	105-6A 105-3B 105-3A	13.9 19.1	2	12 2	109-46	
		200	0 2		-							<del>      -    </del>	7	7 7	++++	
	5		2 2			3(G)	2 4 C C C		(x)	9	8 9 2 2		9	= =	1	
	الم المراجعة	A 1 4 8 4 8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8	DEO	Y(X) Y(G) Y(G) Y(G) Y(G) Y(G)	0 0 0	PUL	TV(C		2 2 2 8		REF(	1/c(x)	2	TIN	13 VE	
	TX(+) TX(-) TX(-) RX(+) RX(+) RX(-) RX(-)	REG	> S	7 S S - S - S - S - S - S - S - S - S -		P 7 7 9	2 2 2 2 2		REG GND REG .5V REG +6V DUB NPOT REF(X)	2 2	OUTPUT REF(X) OUTPUT REF(G) INPUT REF(G)	N S S	5	9 9	REG GND REG +13V REG -13 V NC	
	PAN MA	S   S	5 5	TO OUT PUT		1 T T T T T T T T T T T T T T T T T T T	D T T D O				T I I	NC NC OUTPUT		CH2	- 2 2	
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· · · · · · · · · · · · · · · · · · ·				3-6 3-7 3-9 3-6 3-9 3-10	1 2 4	4 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4								18181	N   N   N   N	
				A,653-5 A,653-6 A,653-6 A,653-8 A,653-8 A,653-9	4,654-2 1,654-2	A,654-6 A,654-6 A,654-7 V,654-8	A,654-1 1,654-1 1,654-1 654-1 654-1		A, 650 1, 650	A,65	A, 65 A, 65 B, 65	1, 65		1,6	A,602 A,602 A,602	
- -				166A,653-5 166A,653-5 166A,653-5 166A,653-6 166A,653-8 166A,653-9 166A,653-9	166A,654-1 166A,654-2 166A,654-2	-166A,654-4 -166A,654-6 -166A,654-6 -166A,654-8	166A,654-1 166A,654-1 166A,654-1 166A,654-1 166A,654-1		166A,650 166A,650 166A,650	166A,65	166A,65 166A,65 166A,65 166A,650	166A,65	0.4	167A,60	167A,602 167A,602 167A,602 167A,602	
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				CP-168A,683-9 CP-168A,683-3 CP-168A,683-6 CP-168A,683-6 CP-168A,683-7 CP-168A,683-1 CP-168A,683-1 CP-168A,683-1 CP-168A,683-1 CP-168A,683-1	CP-166A,654-1 CP-166A,654-1 CP-166A,654-2 CP-166A,654-2	CP-166A,654-4 CP-166A,654-5 CP-166A,654-7 CP-166A,654-7 CP-166A,654-8	CP-166A,654-9 CP-166A,654-10 CP-166A,654-11 CP-166A,654-12 CP-166A,654-13 CP-166A,654-13		CP-166A,650-1 CP-166A,650-2 CP-166A,650-3 CP-166A,650-4	CP-166A,65 CP-166A,65 CP-166A,65	CP-166A,65 CP-166A,65 CP-186A,650 CP-186A,650	CP-166A,655-1 CP-166A,655-2 CP-166A,655-2		CP-167A,60	CP-167A,602-4 CP-167A,602-3 CP-167A,602-2 CP-167A,602-1	

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° 213}- 212}-	204-11	INPUT REG(G)	3	INPUT REF(X) DUB INPUT REF(X)	139-1·2 204-10 204-4	₹224 ₹223m	* 3	104-1 · 2 · 3 104-1 · 2 · 3 104-4	REG GND REG +13V	3 4	REG GND REG +13V	141-1·2·3 141-1·2·3 141-4	13V-2	-		NC NC	3
₹ <sup>∞</sup> 211 <b>&gt;</b> -	204-9		5	GND OUTPUT REF(X)	204-8	₹222	13V-2 -13V	104-5	REG -13V	5 6	REG -13V	141-5	■-13V	-		NC NC	5 6
¥ ∞134 <b>&gt;</b> -	103-3A	DUB OUTPUT REF(G)  GND  CF ID REGEN	8 9	DUB OUTPUT REF(X)  GND  NC					NC NC	8	NC L;NO SIG	104-7B,140-50A	<b>-(</b> 1 9 3			NC NC	7 8
160>- 161>-	103-3B 103-4B	SCH DET ENC BLK	10	NC NC		=			NC NC	10	PB SYNC TC DATA C SW PLS	139-37A 140-26B 104-8A,141-41A	- <b>4</b> 2 3 9 - <b>4</b> 2 4 0 - <b>4</b> 1 8 7	-		NC NC	1 0
163> 164>	103-6B 103-7B	ENC CLAMP OUTPUT SYNC	12	HD NC	139-35B,103-5B	162			NC NC	12	Y SW PLS C DO PLS	104-8B,141-41B 104-9A,141-42A	<194 <188	-		NC NC	112
165> 166>	103-8B 103-9B	VISC REGEN L ALT	14	NC VD	139-35A	<b>-</b> ≺226			NC NC	14	Y DO PLS	104-9B,141-42B,113-23B		-		NC NC	14
167 <b>&gt;</b> 140 <b>&gt;</b>	103-10B 103-10A	P ALT VO FIELD O/E	16	EXT SC DET	139-24B 139-24A	₹227 <b>₹</b> 228			NC NC	16	TBC SPEED	104-10B 104-11B,141-43A	<b>-&lt;</b> 196 <b>-&lt;</b> 197	400>	200-2	NC TX(-)	16
0.5	139-32A,222-7	NC NC SERIAL CLK	18	NC	139-31A	<b>4</b> 229			NC NC	18	NC L;FWD/REV X13	104-12B,141-45B	<b>&lt;</b> 198	401 <b>&gt;</b> 267 <b>&gt;</b>	200-4 205-4	RX(-) OUTPUT T/C(G)	18
215 <del>-</del> 135 <b>-</b> 216 <b>-</b>	139-32R,222-7 103-4A,139-27B 139-32B,222-8	L;H SHIFT INH SERIAL READY	21	H;IN PHASE L;SYSTEM RESET	139-34B 139-27A 113-35B,139-39A,222-11	230 231 232			NC NC	20 21 22	L;REV/H;FWD NC	104-12A,141-45A		292	109-42B	NC AU STB 0	2 0
217>	139-33A,222-9	SERIAL RX	23	SERIAL TX	139-338,222-10	233			NC NC	23	H;SERVO LOCK PB FP 2 PB FP 1	141-46A 139-29A 139-29B	- <b>€</b> 2 4 1 - <b>€</b> 2 4 2 - <b>€</b> 2 4 3	273	109-41A 109-43B 105-17B	AU SCK EXT SC DET	2 2
152>	103-28A	REF C(G)	2 5 2 6	REF C(X)	103-28B	<b>--</b> 179			. NC	25	L;VISC EXT H;CHROMA MUTE	139-28A 141-47A	245	***	103-178	NC NC	2 4 2 5 2 6
153 <b>&gt;</b> 154 <b>&gt;</b>	103-30A 103-31A	U AXIS SC(G) V AXIS SC(G)	27	U AXIS SC(X) V AXIS SC(X)	103-30B 103-31B	≺180 ≺181			NC NC	27	SERVO V	141-448	₹246	231>	105-21B 106-25B	H:IN PHASE L:VISC EXT	27
155>	103-33A	NC TBC'd R-Y(G)	30	NC TBC' d R-Y(X)	103-33B	182			NC NC	3 0	L;DT DT V	113-9A,114-29B 113-8A		242>	106-23B	PB FP 2 NC	3 0
156 <b>&gt;</b> 157 <b>&gt;</b>	103-34A 103-35A	TBC'd B-Y(G) TBC'd Y(G) NC	31 32 33	TBC'd B-Y(X) TBC'd Y(X) NC	103-34B 103-35B	183			NC NC	31 32 33	Y WZ DT X3 NC	113-11A 113-9B	1	229	105-18B 105-20A,222-7	REF 1ST FIELD SERIAL CLOCK	3 1
500 <b>≻</b> 158 <b>≻</b>	140-28B	L;SYNC DELAY H;VIDEO EE(DEMOD)	3 4	REF SYNC L;NOISELESS PB	141-43B 141-46B,104-13B	<b>₹234</b>			NC NC	34	NC NC PB FIELD O/E	113-10A	-	217>	105-23A,222-9 105-15B	SERIAL RX NC VD	3 3
218>	221-1	NC SYNC PHASE	36	L;METAL/H;OXIDE NC	103-38B,141-37B,262-58				NC NC	36	Y PCM MUTE C PCM MUTE	104-10A,113-16A 104-11A,113-16B	<b>(</b> 189	139	103-13B 103-8A 106-9B	CHARA FRAME PB SYNC	3 5 3 6 3 7
219>- 220>-	221-3 221-5	HUE OUTPUT VIDEO LEVEL		SC PHASE SET UP	221-2 221-4	<b>₹</b> 236 <b>₹</b> 237			NC NC	38	C WZ NC	113-11B		406>	223-7 113-35B,105-22B,222-11	KEY OUT L:SYSTEM RESET	38
221>	103-42 · 43	Y/C DELAY NC	41	OUTPUT CHROMA LEVEL NC		<b>→</b> 238			NC NC	40	NC NC		]			NC NC	4 0
-5 V -2 ● -5 V -2 ● 8 V □	103-42 • 43	REG -5V REG -5V REG +8V	42	REG -5V REG -5V REG +8V	139-42 · 43 139-42 · 43 139-44 · 45	-5V-2 -5V-2 -8V			NC NC	42	DEMOD Y(X) DEMOD Y(G) NC	104-29B 104-30B	<b>4</b> 203 <b>4</b> 204	-5 V - 2 ● -5 V - 2 ●	105-42 · 43 105-42 · 43	REG -5V	4 2
8 V 🗆 — 5 V O —	103-44 · 45 103-46 · 47	REG +8V	45	REG +8V	139-44 · 45 139-46 · 47	-08 V			NC NC	45	NC DEMOD C(X)	104-32B	<b>-</b> \$205	8 V	105-44 · 45 105-44 · 45 105-46 · 47	REG +8V REG +8V REG +5V	4 4 4 5 4 6
5 V O	103-46 · 47 103-48 · 49 · 50	REG +5V REG GND	47	REG +5Y REG GND	139-46 · 47 139-48 · 49 · 50	05V m	<b>1</b>	104-48 • 49 • 50	NC REG GND	47	DEMOD C(G) REG GND	104-33B 141-48 · 49 · 50	<b>4</b> 206 +	5 0	105-46 · 47	REG +5V	47
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	CN212		CN213 1 CH1 PB/EE(X) 111-33B	VR-116A,401-2 2 CH1 PB/KE(Q) 111-32B 3A - 34B (-309 VR-116A,401-3 0 CH1 PB/K) 111-37 (-310 VR-116A,401-5 5 NC NC NC NC-116A,401-6 6 NC	CR214 VR-116A,400-1 1 CHI HP METER(X) 111-41 VR-116A,400-2 2 CHI HP METER(G) 111-40 VR-116A,400-3 3 CH2 HP METER(X) 110-41  VR-116A,400-4 4 CH2 HP METER(X) 110-40  VR-116A,400-4 4 CH2 HP METER(G) 110-40  (301					VR-116A,407-1 1 REG -13V 104-513V VR-116A,407-2 2 REG +13V 104-413V-2	NE GRD	HC-14B,554-1   1   SYNC PHASE   105-37A   <218   HC-14B,554-2   2   SC PHASE   105-38B   <238   HC-14B,554-3   3   HUE   105-38B   <238   HC-14B,554-4   SET UP   105-38B   <230   HC-14B,554-6   5   UTPUT VIDEO LEVEL   105-38B   <237   HC-14B,554-6   6   OUTPUT CHROMA LEVEL   105-34B   <220   <220   HC-14B,554-6   6   OUTPUT CHROMA LEVEL   105-34B   <220   <220   <220   HC-14B,554-6   6   OUTPUT CHROMA LEVEL   105-34B   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220   <220	7 Y/C DELAY 105-40A		CN222   FEG GND   104-1   CN22   FEG GND   104-1   CN22   FEG GND   104-1   CN-148.560-2   2   FEG GND   103-46   CN-2   CN-2	10 SERIAL TX 105-228,138-38B 11 L:SYSTEM RESET 105-228,113-35B,	- 4 - 4 - 4
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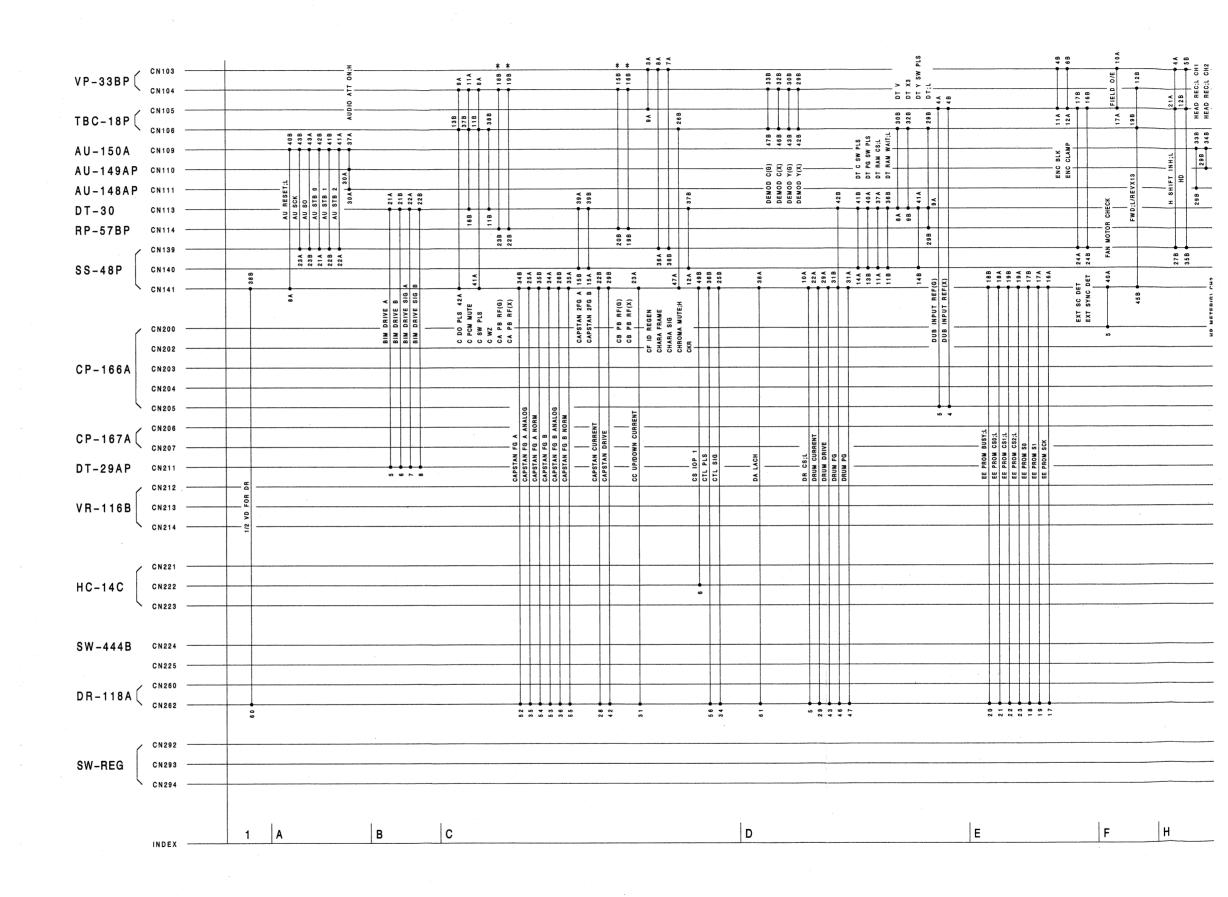
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NC NC	5	NC NC				NC NC	5	NC NC		-	-13V	106-4 106-5	REG -13V NC	5 REG -13V 6 NC	294-5	-13V
NC NC	8 9	NC NC				NC NC	8	NC NC			290>	109-40B 113-24B,262-3	L:AU RESET SV A1	8 SV A3 9 SV A2	262-1,113-25B 262-2,113-25A	<b>√</b> 3 4 8 <b>√</b> 3 2 7
NC NC	11	NC NC				NC NC	11	NC NC		-	356>	113-34B,262-7 113-30B,262-9	L;SV WR SV D0	11 L;SY RD 12 L;I/O RESET	262-6,113-35A 262-8	
NC NC	14	NC NC				NC NC	14	NC NC		1	354> 355>	113-32B,262-13 113-33B,262-15	SV D4 SV D6	14 SV D3 15 SV D5	262-12,113-32A 262-14,113-33A	<332 <333 <334
TX(-) RX(-)	17	TX(+) RX(+)	200-1 200-3	<b></b> <403 - <b>-&lt;</b> 404		NC NC	17	NC NC		1	408> 409> 410>	262-17 262-19 262-21	EE PROM S1 L;EE PROM CS0	16 SV D7 17 EE PROM S0 18 L;EE PROM BUSY	262-16,113-34A 262-18 262-20	<335 <434 <435
OUTPUT T/C(G)  NC  AU STB 0	19 20 21	OUTPUT T/C(X)  PB LTC(Q)  PB LTC(X)	205-3 109-29A,109-29B 109-28B	<b>(</b> 277 <b>(</b> 268 <b>(</b> 280		NC NC	1 9 2 0 2 1	NC NC			411 <b>&gt;</b> 412 <b>&gt;</b> 413 <b>&gt;</b>	262-23 262-25 262-27	L;EE PROM CS2 TAPE BIGIN T-REEL CURRENT	19 L;EE PROM CS1 20 TAPE END 21 S-REEL CURRENT	262-22 262-24 262-26	<b>-⟨</b> 436 - <b>⟨</b> 437 - <b>⟨</b> 438
AU STB 2 AU SCK Ext SC Det	2 2 2 3 2 4	AU STB 1 AU SO EXT SYNC DET	105-41B 109-43A 105-16B	<b>─﴿</b> 291 <b>─﴿</b> 274 <b>─﴿</b> 227		NC NC	2 2 2 3 2 4	NC NC			414 <b>&gt;</b> 415 <b>&gt;</b> 416 <b>&gt;</b>				262-28 262-30 262-32	- <b>4</b> 439 - <b>4</b> 440 - <b>4</b> 441
NC NC H:IN PHASE	2 5 2 6 2 7	NC NC L:H SHIFT INH	103-4A,105-21A	<b>&lt;</b> 135		NC NC	2 5 2 6 2 7	NC TC DATA NC	106-10B	<b>-4</b> 240	417>	262-35 262-37 262-39	CAP FG A ANALOG S-TENSION LOADING DRIVE	25 CTL SIG 26 CAP FG B ANALOG	262-34 262-36 262-38	-4442 -4443 -4444
L:VISC EXT PB FP 2 NC	2 8 2 9 3 0	NC PB FP 1 VO 1ST FIELD	106-24B	<b>(</b> 2 4 3		NC NC	29	L;SYNC DELAY NC NC	105-34A	<b>-√</b> 500	420>	262-41 262-43	T-REEL DRIVE Drum Drive	28 S-REEL DRIVE 29 CAPSTAN DRIVE	262-40 262-42	-<445 -<446 -<447
REF 1ST FIELD SERIAL CLOCK SERIAL RX	3 1 3 2 3 3	NC SERIAL READY SERIAL TX	105-22A,222-8 105-23B,222-10	<b>(</b> 216		NC NC	3 1 3 2 3 3	NC NC		1	423>	262-47 262-49 262-51	DRUM PG S-REEL FG 2 T-REEL FG 2	31 DRUM FG 32 S-REEL FG 1	262-46,113-42B 262-48	-448 -449 -450
NC VD Chara Frame	3 4 3 5 3 6	SERIAL CS TBC HD CHARA SIG	105-20B 103-5B,105-12B 103-7A	— <b>&lt;</b> 230 — <b>&lt;</b> 162		NC NC	3 4 3 5 3 6	NC NC			426>	262-53 262-55	CAP FG B CAP FG B NORM	34 CAP FG A 35 CAP FG A NORM	262-52 262-54	4 5 1 4 5 2 4 5 3
PB SYNC KEY OUT L:SYSTEM RESET	3 7 3 8 3 9	NC KEY TEST KEY IN 1	223-9	<b>&lt;</b> 405 <b>&lt;</b> 402		NC NC	37 38 39	NC NC			430>	262-61	NC DA LACH NC	37 L:METAL/H:OXIDE 38 1/2 VD FOR DR	103-38B,105-36B,262-58 262-60	
NC NC REG -5V	40 41 42	NC NC REG -5V	293-7	— <b>●</b> -5V-2		NC NC	40	NC NC			432> 187> 188>	200-5 104-8A,106-11B 104-9A,106-13B	FAN MOTOR CHECK C SW PLS C DO PLS	40 L:REG TEMP 41 Y SW PLS	293-1 104-8B,106-12B 104-9B,106-14B,113-23B	-<4 5 6 -<1 9 4 -<1 9 5
REG -5V REG +8V REG +8V	4 3 4 4 4 5	REG -5V REG +8V REG +8V	293-8 293-6 293-6			NC NC	43 44 45	NC NC			197> 159> 191>	104-11B,106-17B 103-39A 104-12A,106-20B	TAPE SPEED L:SLOW BID L:REV/H:FWD	43 REF SYNC 44 SERVO V 45 L:FWD/REVX13(8)	105-34B 106-27B 104-12B,108-19B	
REG +5V REG +5V REG GND	46 47 48	REG +5V REG +5V REG GND	293-5 293-5 293-2·3·4	—○5 V —○5 V		NC NC	46 47 48	NC NC			241>	106-22B 106-26B	H:SERVO LOCK H:CHROMA MUTE NC	46 L:NOISELESS PB 47 NC 48 H:VIDEO EE(DEMOD)	105-35B,104-13B 103-38A,105-35A	<b>-€</b> 2 3 5
REG GND REG GND	5 0	REG GND	293-2·3·4 293-2·3·4 F1 1.25A	3 3	193> 104-7B,106-8B	NC L;NO SIG	50	NC NC					NC NC	49 CS TIOP 1 50 NC	222-6	4 5 7
4217 4233 4232 4232		<u> </u>	**** <b>\</b>		¥ ¥ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$											
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5-23A,13 5-22B,13 6-39A					1-35A 6-1-25A 4-4-1-4											
IAL RX		G GND G GND G + 8V G + 8V	001(-) V IN-1 Y TEST NC		NC NETER MONITOR G + 13V											
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0-10		1-1	51-8		10-1 10-2 10-3 10-4 10-6 10-6											
C-14B,55		0-148,55	C-14B,51		W - 444A,5 W - 444A,5 W - 444A,6 W - 444A,6 W - 444A,6 W - 444A,6											
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	A NC N	A NC 1 NC 2 NC 3 NC 4 NC 5 NC 4 NC 5 NC 6 NC 7 NC 8 NC 7 NC 8 NC 10 NC 10 NC 11 NC 11 NC 11 NC 12 NC 11 NC 15 NC 15 NC 15 NC 16 TX(-) 17 RX(-) 18 OUTPUT T/C(G) 19 NC 20 AU STB 0 21 AU STB 0 31 SERIAL CLOCK 32 SERIAL RX 33 NC 34 VD 35 CHARA FRAME 36 PB SYNC 37 KEY OUT 38 L:SYSTEM RESET 39 REG -SV 42 REG -SV 42 REG -SV 42 REG -SV 42 REG -SV 44 REG -SV 44 REG -SV 44 REG -SV 44 REG -SV 45 REG GND 49 REG GND 49 REG GND 49 REG GND 50	A	A	MC 1	A	### 1	## 15-48 (2012)  ## 2	A 1			St.   180   184	State   City   Diffeet   State   State   City   Diffeet   State   St	Col.   Col.		Hold   1949

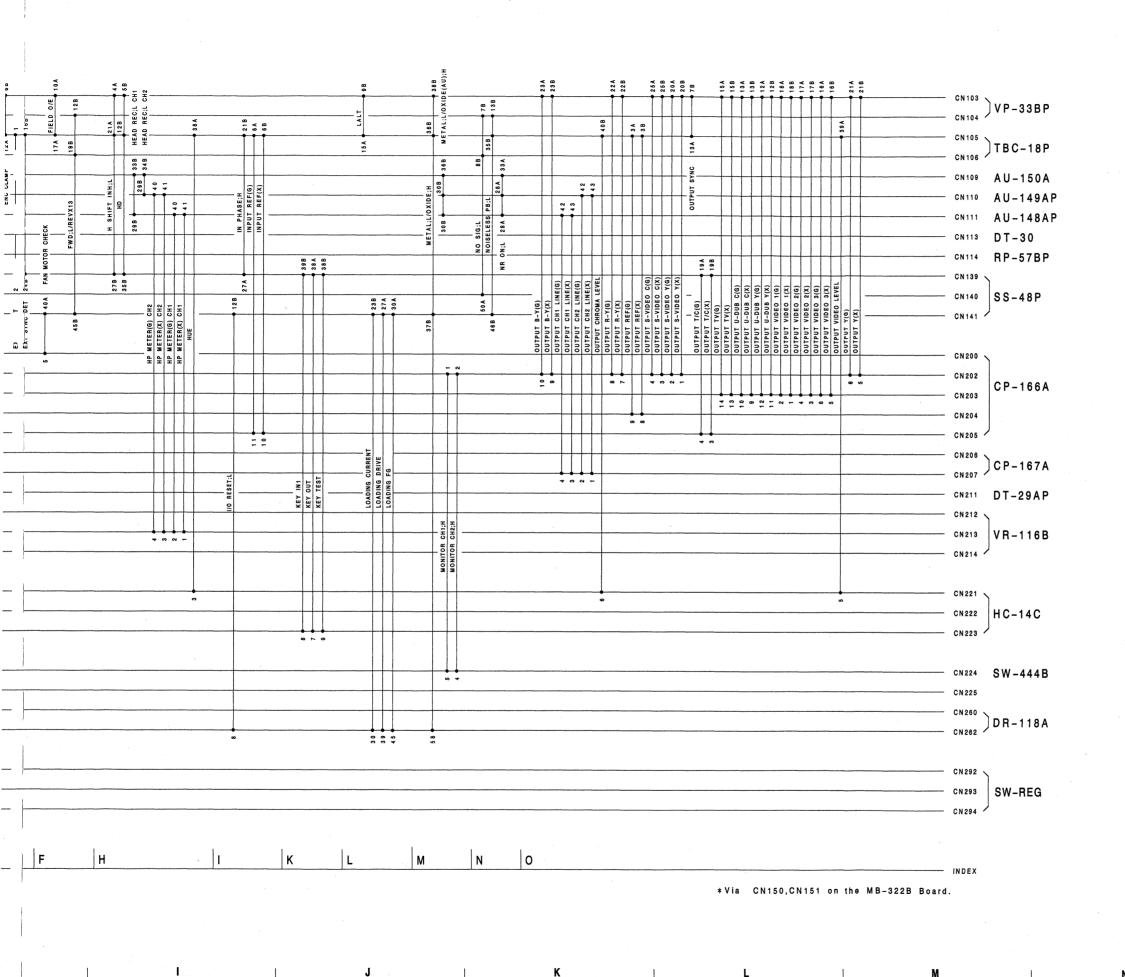
MB-322B BOARD (2/5)
BOARD NO.1-640-038-31
PVW-2650P(EK); #10001-

			-57BP	<del></del> 1				AU-150A	U-15		ח ח				AU-149A (
		A	CN114 ) (SW REG (M)					A		В					A
3	113-1 · 2	REG GND REG GND	1 REG GND 2 REG GND	113-3 • 4				REG GND REG GND	1 2	REG GND	110-1 · 2		1	109-1 - 2	REG GND
5 V - 2 O	113-1-2	REG +5V	3 REG +5V	292-2	-05V-2	5 V - 2 O		REG +5V	3	REG +5V	110-3	-0 5V-2	5 V - 2 O	109-3	REG +5V
8 V ~ 2 D-	113-4	REG +8V	4 REG +8V	292-1	□8 V - 2	8 V - 2 🗆		REG +8V	4	REG +8V	110-4	□ 8 V - 2	8 V - 2 🗆	109-4	REG +8V
-5∨ •	113-5	REG -5V	5 REG -5V	292-5	●- 5 V	-5 V		REG -5V	5	REG -5V	110-5	-5 V	-5 V •	109-5	REG ~5V
		NC GND(RE)	6 NC 7 GND(RE)	<u> </u>	₹392	-		NC NC	7	NC NC	ļ				NC NC
`		NC NC	8 GND(RE)	<u> </u>				NC	8	NC					NC
<b>3</b> —		GND(RE)	9 NC					NC	9	NC					NC
		NC GND(RE)	1 0 NC	-				NC GND	10	NC GND					NC NC
		GND(RE)	1 2 NC			-		NC NC	12	NC NC					NC
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, —		- NC	14 NC					NC NC	14	NC NC			<b>1</b>		GND
		GND(RE) GND	1 5 GND(RE) 1 6 NC					NC NC	15	NC NC			•		GND NC
<b>1</b> —		GND	17 NC					NC	17	NC					NC
		NC	1 8 NC			·		NC	18	NC					NC
		NC GND	19 CB PB RF(X) 20 CB PB RF(G)	151-7	<b>√</b> 3 8 4 <b>√</b> 3 8 5	3-		GND NC	19	GND NC					NC NC
` <del> </del>			21 GND	101-0		3		GND	21	GND					NC
			22 CA PB RF(X)	151-5	₹3 8 6			NC	2 2	NC					NC
			2 3 CA PB RF(G) 2 4 GND	151-6	<b>───────────────────────────────────\$3 8 7</b>	<u> </u>		NC NC	23	NC NC					NC GND
ļ			25 NC		-			NC NC	25	NC NC					GND
		NC	2 6 NC			1-		GND	2 6	GND			<b>1</b>		GND
,			2.7 GND					NC NC	2 7	NC NC				109-33A.111-28A	GND H;NR ON
1			28 NC 29 L;DT	106-29B,113-9A	<del></del>	268>	109-29B,139-20B		28	PB LTC(X)	139-21B 109-29A,139-20B	<b>₹280</b>	269		I;CH2 PB MUTE
	113-15A		3 0 NC		•	2000		NC	3 0	NC			271>		AUDIO ATT ON
	113-15B		3 1 QND					NC NC	31	NC					NC
			32 NC 33 YB PB RF(X)	151-3		269>	110-28A,111-28A	NC L;NR ON	3 2	NC H;CH1 HEAD REC	111-29B	₹284	296>	212-2	NC CH2 PB/EE(G)
			34 YB PB RF(G)	151-4	€3 9 3			NC	3 4	H;CH2 HEAD REC	110-29B	₹285			NC
3-			3 5 GND			270>	111-29A			H;CH2 PB MUTE	110-29A	₹286			NC
	113-14A 113-14B		36 YA PB RF(X) 37 YA PB RF(G)	151-1		271>	110-30A,111-30A	NC H;AUDIO ATT ON	3 6	L;METAL/H;OXIDE(AU H;SLOW EQ ON	110-30B,111-30B	<b>──←</b> 287 <b>←</b> 288	297>	212-4	CH2 PB(G) CH2 PB(X)
	710-140		38 GND	101-2				NC	3 8	L;CH1 PB	111-35B	₹289			HC HC
			3 9 NC			272>	110-35B		3 9	. NC					NC
			4 0 NC 4 1 NC			273>	139-22A	NC AU STB 2	4 0	L;AU RESET AU STB 1	141-8A 139-22B	<b>₹290</b>	301>		12 HP METER(G) 12 HP METER(X)
		NC NC	4 2 NC			2/0/	130-118	NC NC	4 2	AU STB 0	139-21A	₹292	303>		PUT CH2 LINE(G)
		NC NC	4.3 NC			274>	139-23B		4 3	AU SCK	139-23A	₹293	304>		PUT CH2 LINE(X)
-13V	211-10,113-44 · 45 211-10,113-44 · 45	REG -13V REG -13V	4 4 REG -13V 45 REG -13V	294-4,211-10	──第-13V ──第-13V	-13V		REG -13V	4 4	REG -13V REG -13V	110-44 • 45		- 13 V TE	109-44 · 45	REG -13V
3V-2 D	211-9,113-46 - 47		46 REG +13V	294-5,211-9	□13V-2	13V-2 -		REG +13V	46	REG + 13V	110-46 • 47	□13V-2	13V-2 -	109-46 - 47	REG +13V
3 V - 2 🗆	211-9,113-46 • 47	REG + 13V	4 7 REG + 13V	294-5,211-9	□13V-2	13V-2 -		REG +13V	4.7	REG + 13V	110-46 • 47	□13V-2	13V-2 -	109-46 - 47	REG +13V
	113-48 · 49 · 50 113-48 · 49 · 50		48 REG GND 49 REG GND	294-6		1		REG GND REG GND	4 8	REG GND REG GND	110-48 - 49 - 50			109-48 - 49 - 50	REG GND
3	113-48 • 49 • 50		50 REG GND	294-6		<b>1</b> —		REG GND	5 0	REG GND	110-48 - 49 - 50		<b>-</b>	109-48 - 49 - 50	REG GND
	CNZEG	0-2 1 REG 45V 283-2	10 UNREG +18V 294-3		CN282 2 SV A2 141-8B,113-28B 4 SV A2 141-8B,113-28A 4 SV A1 141-1B,113-24B 5 L;SV A0 141-1B,113-24A 6 L;SV RD 141-1B,113-24A 7 L;SV WR 141-1B,113-34B	10   RESET   141-128	15 SV D6   1	23 L;EE PROM CS2 141-18A 24 TAPE BEON 141-28B 25 TAPE BEON 141-21B 26 S-REL CURRENT 141-21B 27 T-REL CURRENT 141-21A 29 GAPSTAN CURRENT 141-22A 41-22A 41-22A 41-22A 41-22A 41-22A 41-22A 41-22A 41-22A	30 LOADING CURRENT 141-23B  31 CC UP/DOWN CURRENT 141-23A  32 POSITION CURRENT 141-24B	35 CAPSTAN CORREN. 1-1-25A 35 CAPSTAN FG A ANALOG 141-25B 37 S-TENSION 141-25B 38 LOADING DRIVE 141-27B 40 S-REEL DRIVE 141-27B	41 T-REEL DRIVE 141-28A 42 CARTAN DRIVE 141-28B 43 CARDIN BRINE 141-28B 44 TERSION SERSOR VCC 141-38B 45 LOADIN FG 141-38B 46 DRIUN FG 141-38B 47 DRIUN FG 141-38A	48 S-REEL FG A 141-328  40 S-REEL FG B 141-328  50 T-REEL FG B 141-328  51 T-REEL FG B 141-33A  52 CAPSTAN FG B 141-34B  54 CAPSTAN FG B 141-34A  55 CAPSTAN FG B NORM 141-35A	56   SWITCHED CTL   141-368,113-408	<u> </u>	CN282 CN282 114.4 CBV-2
		DR-118A,300-1 DR-118A,300-2 DR-118A,300-5 DR-118A,300-6 DR-118A,300-6 DR-118A,300-6 DR-118A,300-7 DR-118A,300-7 DR-118A,300-7	DR-118A,300-		DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302-	DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302-	DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302-	DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302-	DR-118A,302-	DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302-	DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302-	DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302- DR-118A,302-	DR-118A,302-55 DR-118A,302-57 DR-118A,302-58 DR-118A,302-69 DR-118A,302-60 DR-118A,302-62 DR-118A,302-62 DR-118A,302-62	DR-118A,302-	SW REG.2-1

AU-149	AU-14		7			-148A	P (SW REG 側)	i					T-3		1	
AU-149		SW REG (6)			AU-148A (		B B			Г		D1-30 (		(SW REG (R)		]
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REG GN			111-1-2		110-1-2 REG GND	2	REG GND	113-1 · 2			111-1-2	REG GND	2	REG GND	114-1 • 2	-[
REG +8			111-3 -05V-2 111-4 -08V-2	5V-2 O	110-3 REG +5V 110-4 REG +8V	3 4	REG + 5V	113-3		5 V - 2 □ 8 V - 2 □	111-3	REG +5V REG +8V	3 4	REG +5V	114-3	O5 V
REG -			111-4 U8V-2	8V-2U -5V ●	110-4 REG +8V	5	REG -5V	113-4	-5V	-5∨ ●	111-4	REG -5V	5	REG -5V	114-4	
NC NC	6		"	·	NC NC	6	NC NC	· · · · · · · · · · · · · · · · · · ·	7	-		NC NC	6	NC NC		1
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GND	. 14			1	GND	14	NC			>	114-36A	YA SYNC REF(X)	14	YA SYNC REF(G)	114-37A	<del>1</del> ≺
GND	1 5		-	3-	GND	15	GND			<b>&gt;</b>	114-30A	YB SYNC REF(X)	15	YB SYNC REF(G)	114-31A	$\vdash$
NC	1 6				NC	1 6	NC			189>	104-10A,106-36B	Y PCM MUTE	16	C PCM MUTE	104-11A,106-37B	190
NC	17				NC	17	NC.			<b>&gt;</b> _	104-35B	Y RF ENV	17	NC		4
NC	18			-	NC NC	18	NC			.  -		NC	18	NC		٠,
NC NC	19				NC NC	20	NC NC			· : :	211-1 211-3	SG A(+) SG B(+)	20	SG A(-)	211-2	Ð
NC	21				NC NC	21	NC NC				211-5	BIM DRIVE A	21	SG B(-) BIM DRIVE B	211-6	$\Box$
NC	22					2 2	NC			<b>;</b>	211-7		22	BIM DRIVE SIG B	211-8	1∹
NC	2 3	NC			NC	2 3	NC					NC	2 3	Y DO PLS	104-9B,106-14B,141-42B	195
GND	2 4			<b>1</b> —	GND	24	NC NC			326>	141-108,262-4	SV A0	2.4	SV A1	141-9A,262-3	<347
GND	2.5			•	GND	2.5	GND		<b>—</b>	327	141-98,262-2	SV A2	2.5	SV A3	141-88,262-1	
GND GND	26				GND GND	2 6	NC GND		<u>-</u> L	と	140-7A 140-8A	SV A4 SV A6	2 6	SV A5 SV A7	140-8B	ď
H:NR C			<del>                                     </del>	269>	109-33A,110-28A H;NR ON	2 7	GND NC			$\Box$	140-8A 140-9A	SV A6	2 7	SV A7	140-9B 140-10B	$\Box$
H;CH2 PB		H;CH2 HEAD REC	₹285	270	109-35A H;CH1 PB MUTE		CH1 HEAD REC		₹284	<b>;</b>	140-10A	SV A10	29	NC NC		1`
H;AUDIO A		L;METAL/H;OXIDE(AU)		271>	109-37A,110-30A H;AUDIO ATT ON		·	109-36B,110-30B	₹287	·  -		NC	30	SV DO	141-12A,262-9	<b>≺</b> 352
NC	3 1	H;SLOW EQ ON	109-37B,111-31B <288		NC	3 1	H;SLOW EQ ON	109-37B,110-31B	<b>-</b> ≺288	332>	141-138,262-10	SV D1	31	SV D2	141-13A,282-11	<353
NC	3 2		212-2 296	. 🗀	NC .		CH1 PB/EE(G)	213-2	₹309	333>	141-148,262-12	SV D3	3 2	SV D4	141-14A,262-13	<354
CH2 PB/E			212-1 (307	309>	213-2 CH1 PB/EE(G)		CH1 PB/EE(X)	213-1	319	334	141-158,262-14	8 V D5	33	SV D6	141-15A,262-15	355
NC NC	3 4		212-2 296		NC NC	3 4	CH1 PB/EE(G)	213-2 109-38B	309	335	141-16B,262-16	SV D7	3 4	L;SV WR	141-11A,262-7	<b>一</b> 【356
CH2 PB	(G) 36		109-39A	310>	NC 213-4 CH1 PB(G)	3 5	L;CH1 PB CH1 PB(Q)	109-38B 213-4	—— <b>≺</b> 289 <b>≺</b> 310	336>	141-11B,262-6	L;SV RD NC	3 5	L;SYSTEM RESET L;DT RAM WAIT	105-22B,139-39A,222-11 140-11B	- C <sup>232</sup>
CH2 PB			212-4 298	311	213-4 CH1 PB(G) 213-3 CH1 PB(X)	37	CH1 PB(G)	213-4	311	<b>,</b>	140-11A	L;DT RAM CS	37	CKR	140-11B	╁
NC NC	38		<b>*</b> **	··/	NC NC	38	NC NC	<del>- · · · · · · · · · · · · · · · · · · ·</del>	<b>— '`</b> ''	´  -	174-118	NC NC	38	NC		1`
NC	3 9				NC	3 9	NC			۶Ť	140-15B	CAPSTAN 2FG A	3 9	CAPSTAN 2FG B	140-15A	]≺
CH2 HP ME		CH2 HP METER(G)		313>	214-2 CH1 HP METER(G)			214-2	₹313	≻⊏	140-13B	DT PG SW PLS	40	SWITCHED CTL	141-36B,262-56	<453
CH2 HP ME		CH2 HP METER(X)		314>	214-1 CH1 HP METER(X)		11 HP METER(X)	214-1	₹314	≻⊏	140-148	DT Y SW PLS	41	DT C SW PLS	140-14A	_⊢′.
		OUTPUT CH2 LINE(G)		315	207-4 OUTPUT CHI LINE(G)				315	거	140-12B	VITC VD	42	DRUM FG	141-31B,262-46	<b>-</b> ★448
UTPUT CH2 REG -1		OUTPUT CH2 LINE(X) REG -13V	207-1	316 <b>&gt;</b> -13V■	207-3 OUTPUT CH1 LINE(X) 110-44 · 45 REG -13V	44 00	PUT CH1 LINE(X) REG -13V	207-3 114-44·45	316 	-13V <b>=</b>	111-44 · 45	NC REG -13V	4 4	NC REG -13V	114-44 • 45	
REG -1			111-44·45 =-13V	-13V	110-44 · 45 REG -13V	45	REG -13V	114-44 • 45	—————————————————————————————————————	-13V	111-44 - 45	REG -13V	45	REG -13V	114-44 - 45	
REG +1			111-46·47	13V-2 -	110-46 · 47 REG +13V	4.6	REG +13V	114-46 - 47		13V-2 -	111-46 • 47	REG +13V	46	REG +13V	114-46 • 47	-013
REG +1	13V 47	REG +13V	111-46 · 47	137-2 □	110-46 · 47 REG +13V	47	REG +13V	114-46 - 47	□13V-2	13V-2 -	111-46 • 47	REG +13V	47	REG +13V	114-46 - 47	O13\
REG GI			111-48 • 49 • 50	<b>3</b>	110-48 · 49 · 50 REG GND	4.8	REG GND	114-48 • 49 • 50		<b>}</b>	111-48 - 49 - 50	REG GND	48	REG GND	114-48 - 49 - 50	1
REG GI			111-48 • 49 • 50		110-48 · 49 · 50 REG GND 110-48 · 49 · 50 REG GND	50	REG GND REG GND	114-48 · 49 · 50 114-48 · 49 · 50			111-48 • 49 • 50	REG GND REG GND	50	REG GND REG GND	114-48 · 49 · 50 114-48 · 49 · 50	Ľ.
	114-4 -06V-2	114-5	139-42-43		200-6,211-11 200-7,6,211-11 200-9 200-1,260-10 141-6,114-44-45 114-46-49-50 1106-48-49-50 141-1-2 2 9 9									113-228 113-228 114-46 114-44 284-1		
	CN292 1 REG 2 REG	REG.2-4 4 REG.400 REG.2-4 5 REG5V	REG.3-7 1 L:REG TEMP REG.3-4 2 REG GND REG.3-5 3 REG GND REG.3-6 4 REG GND REG.3-7 1 REG +8V REG.3-1 6 REG +8V REG.3-1 7 REG -5V		REG.4-4 1 UNREG GND REG.4-6 2 UNREG -16V REG.4-3 4 REG -13V REG.4-1 5 REG -13V REG.4-2 6 REG GND			· <b>-</b>				CN211	4 6 0	DT -29A,390-7 7 BIN DRIVE SIG A DT -29A,390-9 6 BIN DRIVE SIG B DT -29A,390-10 10 REG -13V DT -29A,390-11 11 UNREG GND		
	SW RE	SW RE	8 W W W W W W W W W W W W W W W W W W W		W W W W W W W W W W W W W W W W W W W							DT-29/ DT-29/	DT-29, DT-29A	DT-29, DT-29, DT-29A		

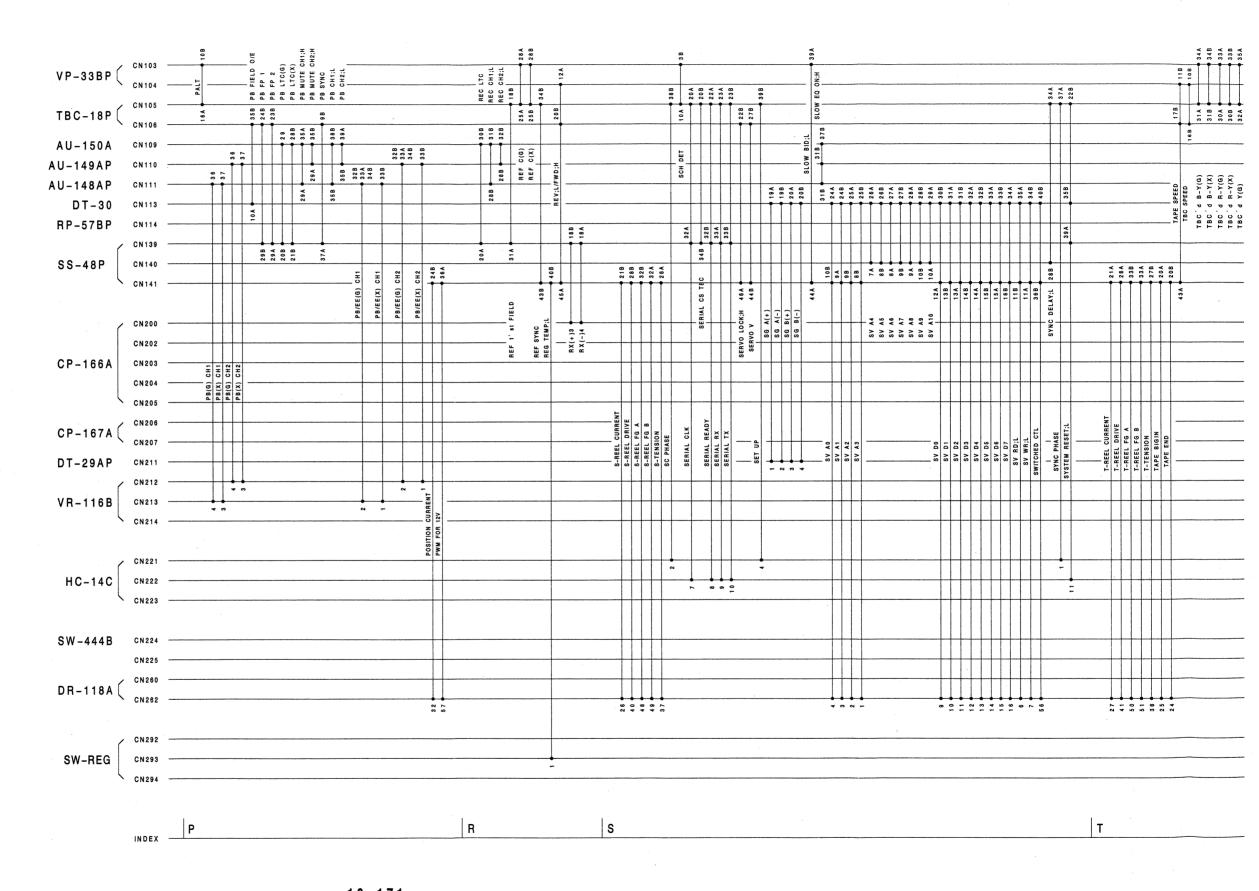
MB-322B BOARD (3/5)
BOARD NO.1-640-038-31
PVW-2650P(EK);#10001-





MB-322B BOARD (4/5)

BOARD NO.1-640-038-31 PVW-2650P(EK);#10001-



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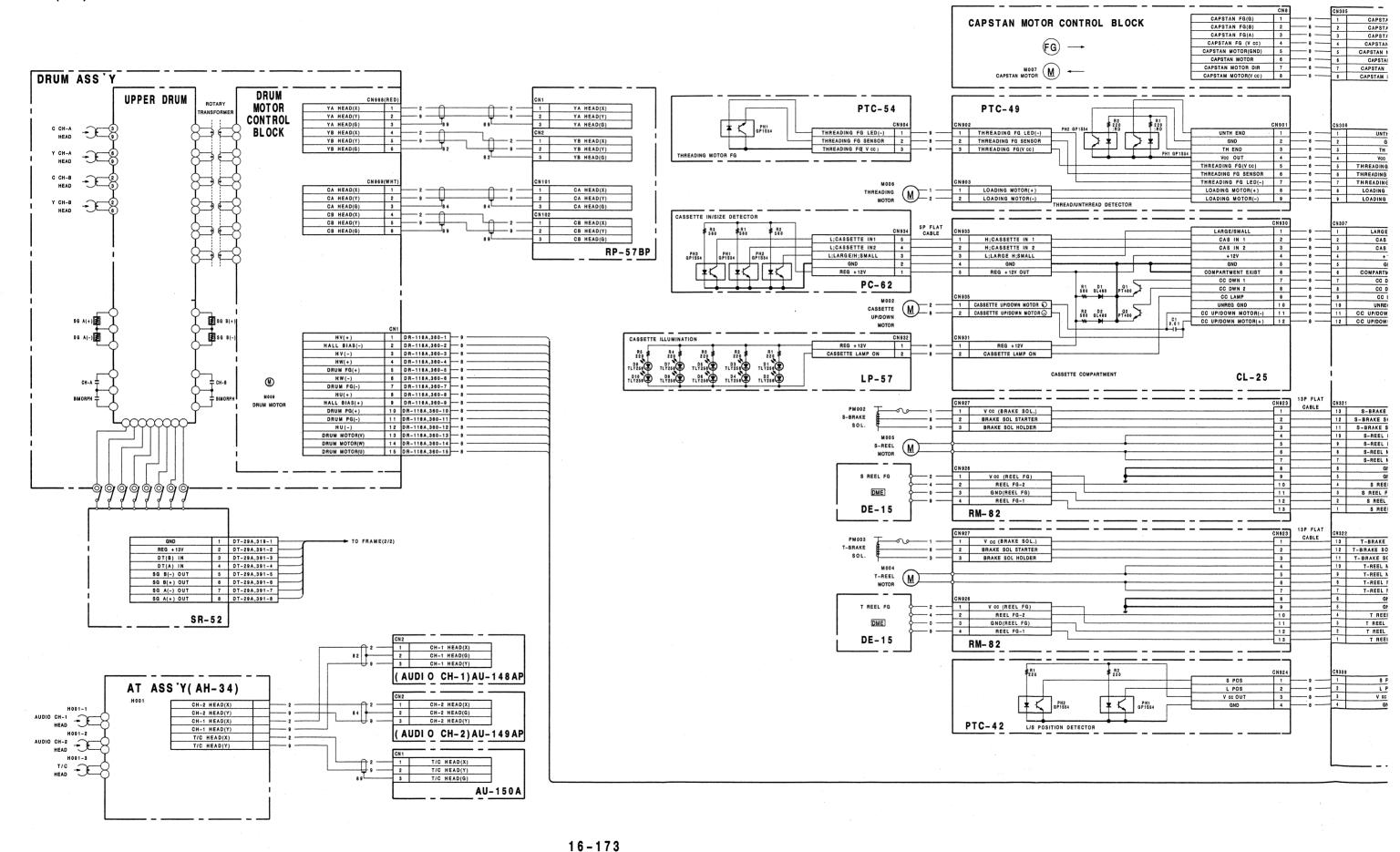
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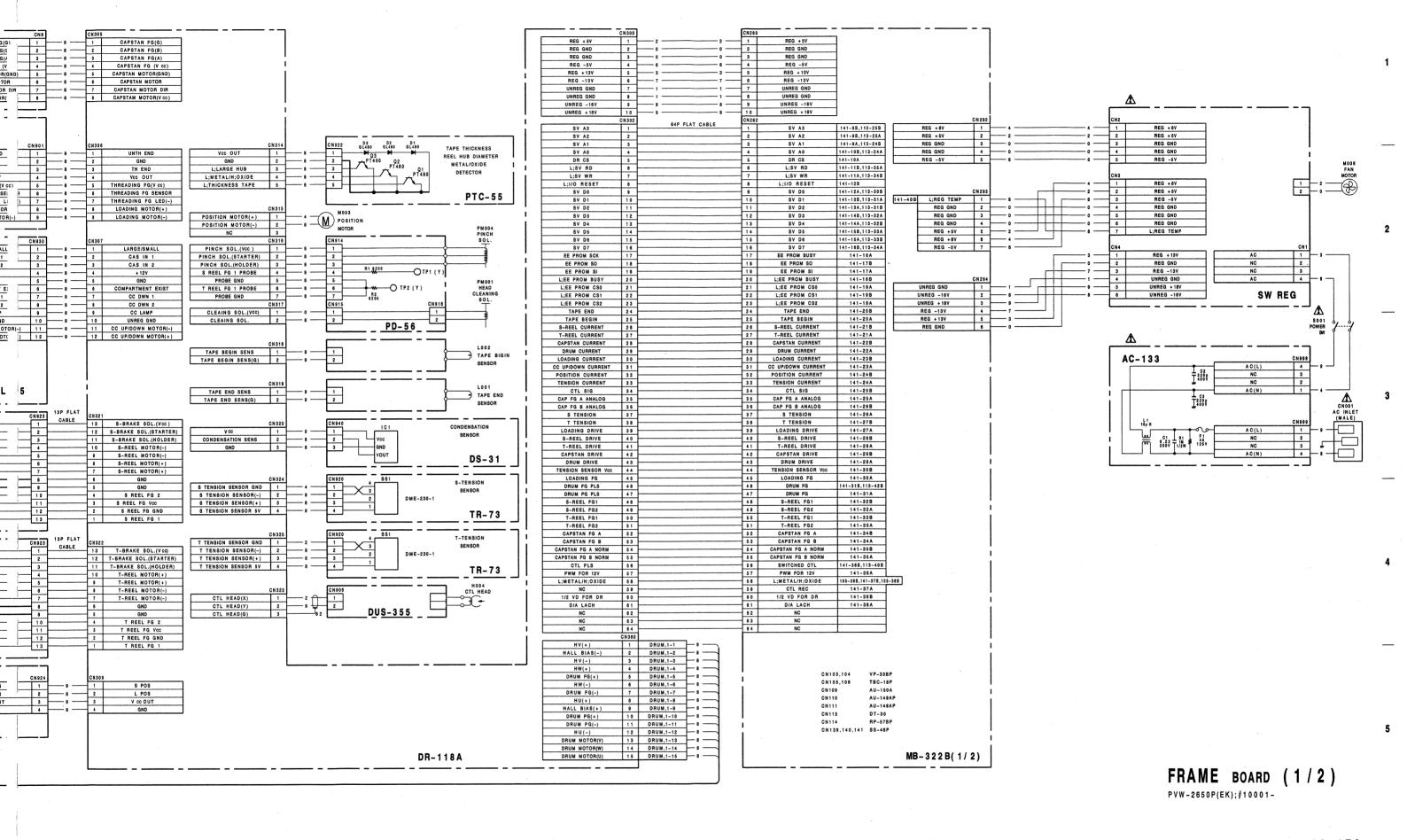
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9 3 1 B B B B B B B B B B B B B B B B B B	27 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	<u>* ↑                                   </u>	2 1 2 B B B B B B B B B B B B B B B B B	4	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	0 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	- CN105 - CN106 ) TBC-18
(9,8,9,8,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,	(a)	H:VIDEO ER(DEMOD) H:VIDEO ER(DEMOD) L:VIDEO EXT VIDEO EX		4	4 4 8 7 4 8	1, 2 1, 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0 4.4 0 4.4 0 4.4	- CN109 AU-150
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2 2 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1	2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			4 4 4 4	2,3	4 4 5 6	- CN139 - CN140 SS-48
4 6 4	L FIELD	988 STA 00 A	418 418 418 418 418 418 418 418 418 418	REF(X)		99	un .	— CN141 /
	2 2		Y PCM MUTE Y RF ENV Y SW PLS Y C DELAY YC DELAY YA PB RF(3) YA PS NR C RFF(3) YA SYNC RFF(3) YB PB RF(3) YB PB RF(3) YB PB RF(3)	N N N N N N N N N N N N N N N N N N N		-	N	- CN200 - CN202 - CN203   CP-166
B B B B B B B B B B B B B B B B B B B				•		9	0	- CN204 - CN205 - CN208
T-REEL DRIVE T-REEL FG A T-REEL FG B T-FENSION TAPE BIGIN TAPE BIGIN TAPE END TRACKING COUT(G) TRACKING COUT(Y) TRACKING COUT(Y) TRACKING COUT(Y) TRACKING COUT(Y)		VIDEO METER						— CN207 ) CP-167 — CN211 DT-29A
				-				- CN212 - CN213 - CN214
			1	-	N	-	70 NO.	- CN221 - CN222   HC-140
					6.6.4	1,2,3		- CN223
© N. ©		m		0 0	-	6 8 8 7	7 9 9	— CN224 SW-444 — CN225
2 4 6 8 8 4 4 8 8 4 8 8 4 8 8 8 8 8 8 8 8								- CN260 - CN262 DR-118
						4 · 6 · 3	0	- CN292 - CN293 SW-REG
	U V	Y		UNREG   RE	G   REG   RE	G REG UNREG	REG   REG   UNREG	— CN294 /
	U V	Y		+ 18V   + 1	-	V GND GND on the MB-322B		- INDEX

MB-322B BOARD (5/5)
BOARD NO.1-640-038-31
PVW-2650P(EK);#10001-

## FRAME(1/2)





16-173

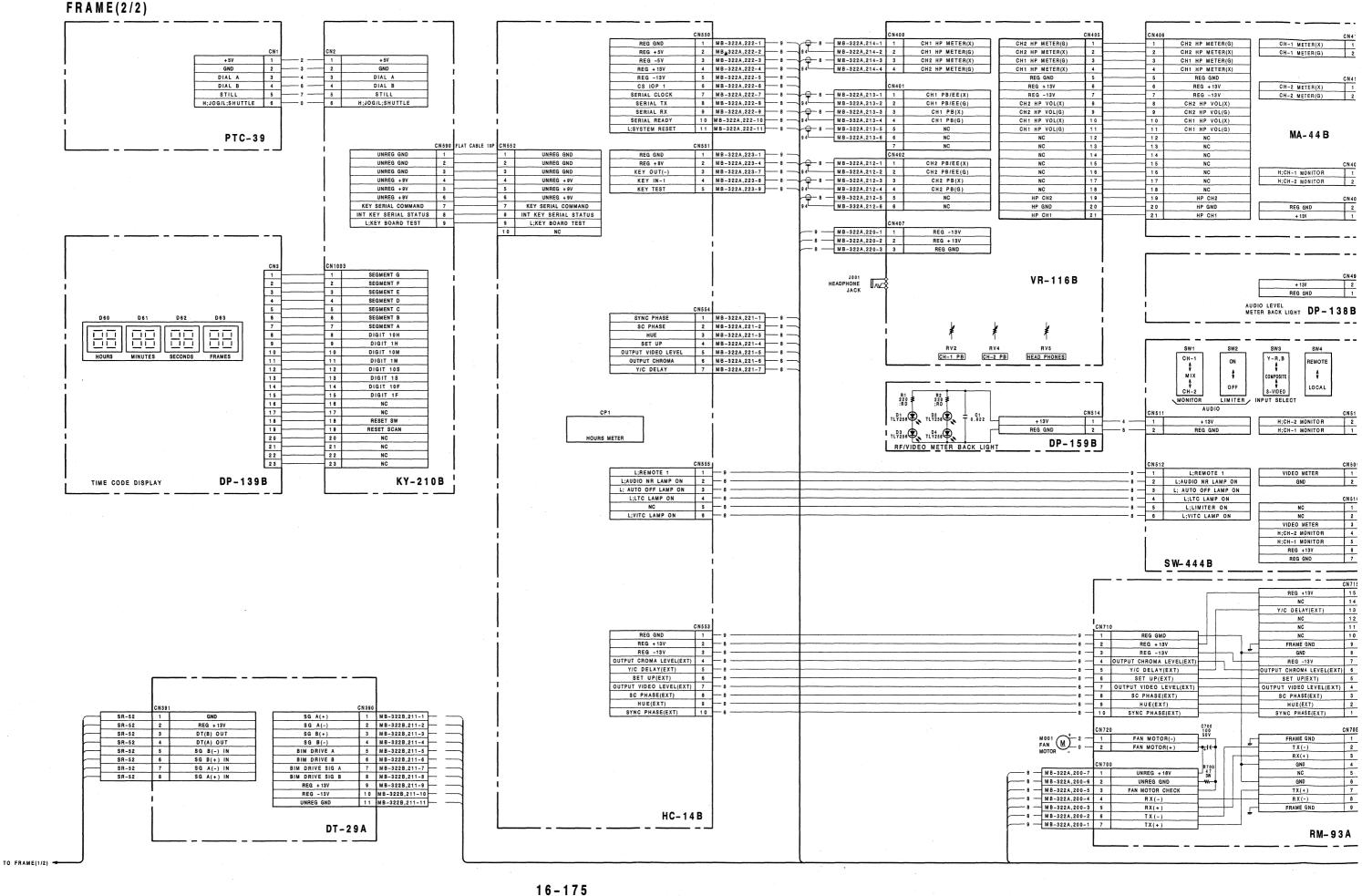
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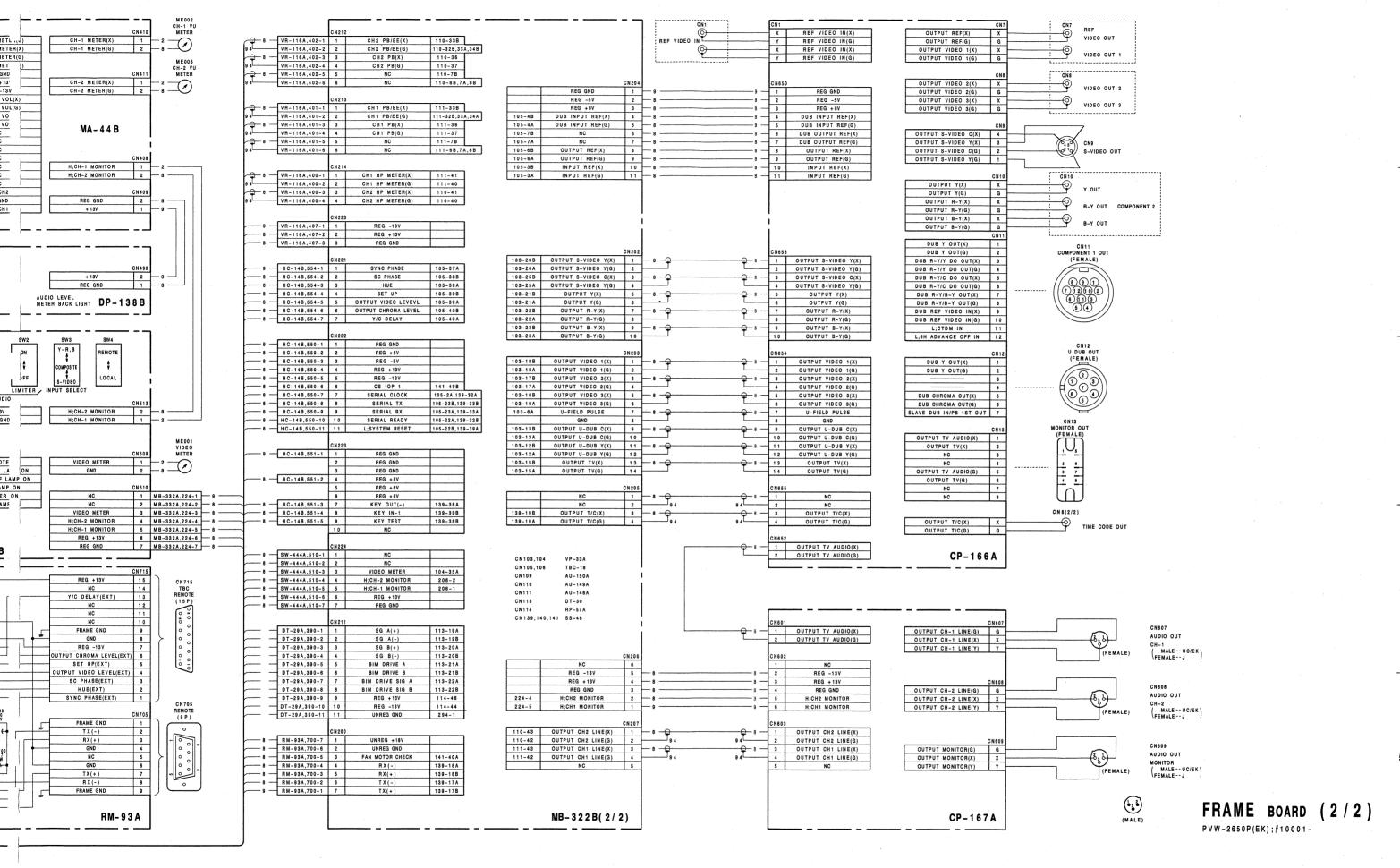


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# FRAME(2/2) FRAME(2/2)



16-175

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# **SECTION 17 SEMICONDUCTOR PIN ASSIGNMENT**

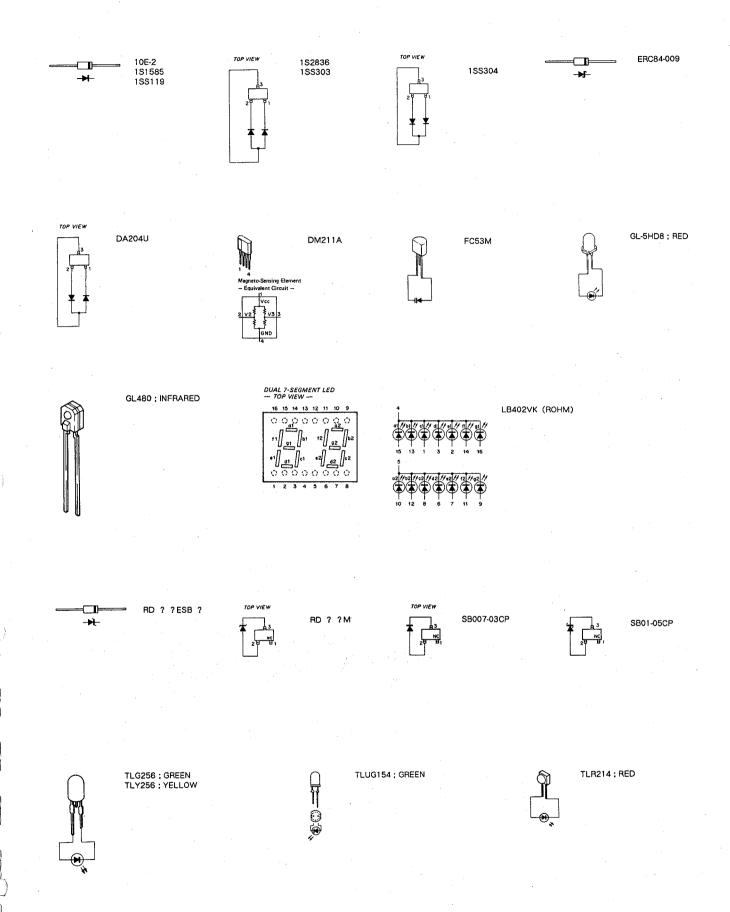
The chart in this section may sometimes show diodes, transistors, and ICs that are not interchangeable. When replacing a component, be sure to refer to the parts list. The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

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		· · · · · · · · · · · · · · · · · · ·			

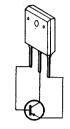




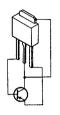
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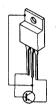
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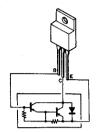
2SA1232



2SA1413



2SA768



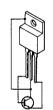
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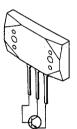
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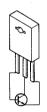
2SC1623 2SC3735 2SC4176 2SC4177 2SC4178 2SC4213B 2SD596



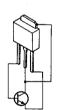
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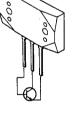
2SC2922



2SC3012



2SC3632



TOP VIEW



2SD1615A 2SD1623

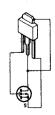




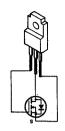


2SJ106





2SJ132



2SJ143





2SK852



2SK94

TOP VIEW



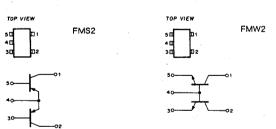
DTA114TK (R1 = 10K, R2 = ∞) DTA123JK (R1 = 2.2K, R2 = 47K) DTA144EU (R1 = 47K, R2 = 47K)

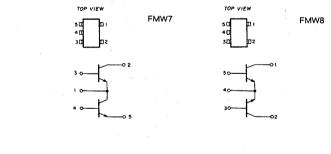


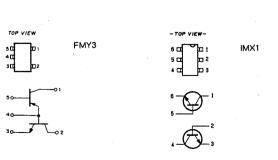
DTC123JK (R1 = 2.2K, R2 = 47K) DTC123JU (R1 = 2.2K, R2 = 47K) DTC144EK (R1 = 47K, R2 = 47K) DTC144EU (R1 = 47K, R2 = 47K)

DTC144EF (R1 = 47K, R2 = 47K)



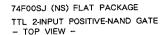


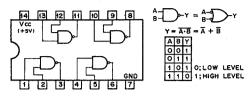






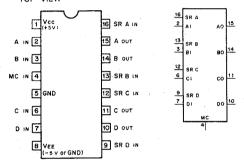
PT480F



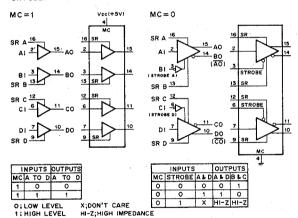


#### AM26LS30PC (ADVANCED MICRO DEVICES)

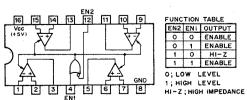




MC ; MODE CONTROL SR ; SLEW RATE CONTROL



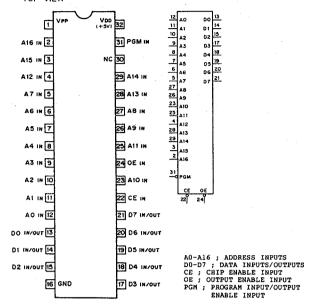
# AM26LS32PC (ADVANCED MICRO DEVICES) HIGH SPEED DIFFERENTIAL LINE RECEIVER - TOP VIEW -



	SENSE	INPUT VOLT
LS32	± 200mV	± 7V
LS33	± 500mV	±15V

#### AM27C010-150DC (AMD)

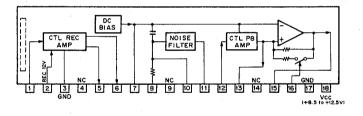
C-MOS 1M (131072x8)-BIT EPROM - TOP VIEW -



#### BX3914 (SONY)

CTL REC/PB AMPLIFIER

- PRINTED SIDE -

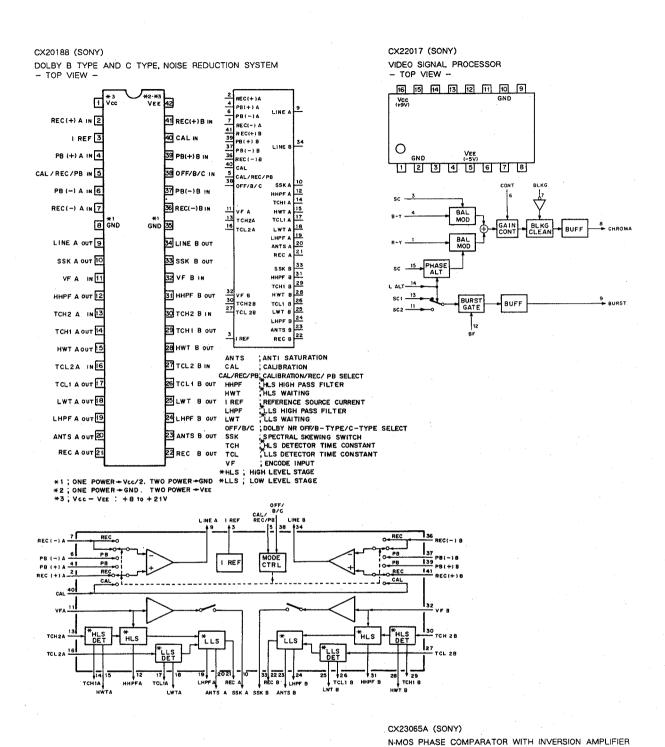


#### CX20060 (SONY)

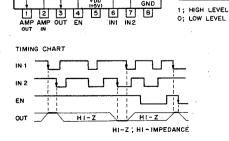
ANALOG SWITCH - TOP VIEW -



CONT.INPUT	sw
LOW OR OPEN	-
нібн	

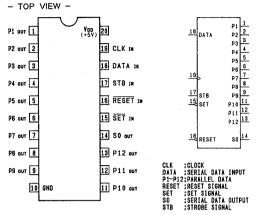






#### CX7991 (SONY)

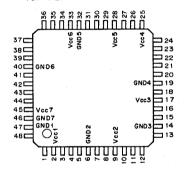
C-MOS 12-BIT SERIAL TO PARALLEL CONVERTER



#### CXA1370Q (SONY)

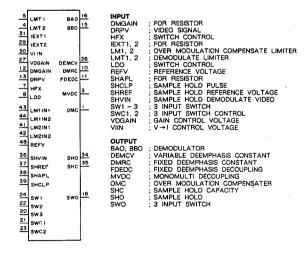
DEMODULATOR/OVER MODULATION COMPENSATOR

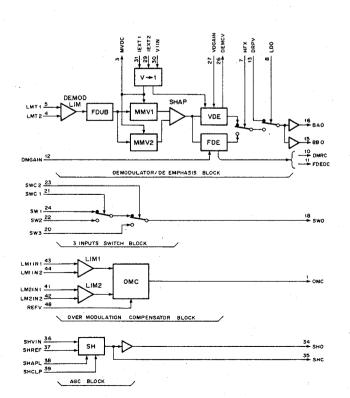
- TOP VIEW -



											(Vcc = + 5V)
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	0	OMC	13	1	DRPV	25	-	Vcc4	37	1	SHREF
2	-	Vcc1	14	-	GND3	26	0	DEMCV	38	1	SHAPL
3	0	MVDC	15	0	BBO	27	_	VDGAIN	39	_	SHCLP
4	1	LMT2	16	0	BAO	28	1	Vcc5	40	<b>-</b> ,	GND6
5	1	LMT1	17	-	Vcc3	29		IEXT2	41	- 1	LM2IN1
6	- 1	GND2	18	0	SWO	30	_	VIIN	42	1	LM2IN2
7	1	HFX	19	-	GND4	31		IEXT1	43	1	LM1IN1
8	1	LDO	20	1	SW3	32	-	GND5	44	1_	LM1IN2
9	-	Vcc2	21	1	SWC1	33	-	Vcc6	45	_	Vcc7
10	0	DMRC	22	1	SW2	34	0	SHO	46		GND7
11	0	FDEDC	23	_	SWC2	35	0	SHC	47	-	GND1
12	T	DMGAIN	24		SW1	36	1	SHVIN	48	1	REFV

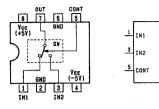
| 12 | 1 | DMGAIN | 24 | 1 | SWI | 36 | 1 |
Vec1, SND1; FOR OVER MODULATION COMPENSATOR
Vec2, GND2; FOR DEMODULATOR
Vec3, GND3; FOR BUFFER
Vec4, GND4; FOR 3 INPUT SWITCH
Vec5, GND5; FOR DEMODULATOR
Vec6, GND6; FOR SAMPLE HOLD
Vec7, GND7; FOR LIMITER





### CXA1450M (SONY) FLAT PACKAGE

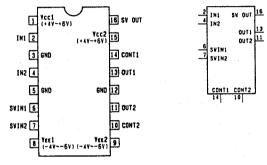
VIDEO SIGNAL SWITCH - TOP VIEW -



#### CXA1451M (SONY)

WIDEBAND VIDEO SWITCH - TOP VIEW -

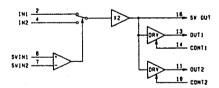




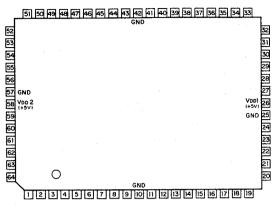
QUT 7

IMPUT
CONT1, 2: POWER SAVE CONTROL PIN OF DRV.1 AND DRV.2
INT1, 2: 1/2-CHANNEL INPUT PIN
SWIN1, 2: IN1/IN2 PINS SWITCH CONTROL PIN

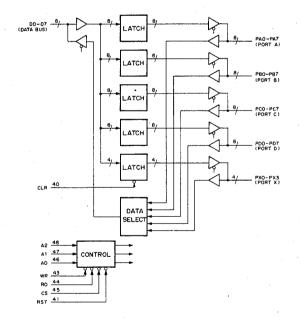
OUTPUT
OUT1. 2 : OUTPUT PIN OF DRV.1/2
SWOUT : OUTPUTS IN1 PIN OR IN2 PIN WHICH HAS BEEN
SELECTED BY SWITCH.



CXD1095Q (SONY) FLAT PACKAGE C-MOS I/O PORT EXPANDER - TOP VIEW -



PIN NO.	iN	OUT	SYM80L	PIN NO.	IN	out	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	iN	ουт	SYMBOL
1			NC	17	0	0	PC6	33			NC	49	0	0	PXO
2			NC	18	0	0	PC7	34			NC	50	0	0	PX1
3	0	0	PB1	19			NC	35	0	0	03	51			NC
4	0	0	PB2	20	0	0	PDO	36	0	0	D4	52	0	0	PX 2
5	0	0	PB3	21	0	0	PD1	37	0	0	D5	53	0	0	PX3
6	0	0	P84	22	0	0	PD2	38	0	0	D6	54	0	0	PAO
7	0	0	P85	23	0	0	PD3	39	0	0	D7	55	0	0	PAI
8	0	0	PB6	24	0	0	PD4	40	0		CLR	56	0	0	PA2
9	0	ō	PB7	25			GND	41	0	F	RST	57		L.	GND
10			GND	26	0		V00 (+5V)	42			GND	58	0		V00(+5V)
11	0	0	- PCO	27	0	0	PD5	43	0		WR	59	0	0	PA3
12	0	0	PC1	28	0	0	PD6	44	0	T	RD	60	0	0	PA4
13	0	0	PC2	29	0	0	PD7	45	0		CS	61	0	0	PA5
14	0	0	PC3	30	0	0	DO	46	0		AO	62	0	0	PA6
15	0	0	PC4	31	0	0	D1	47	0		A1	63	0	0	PA7
16	0	0	PC5	32	0	0	D2	48	0	<u> </u>	A2	64	0	0	PBO



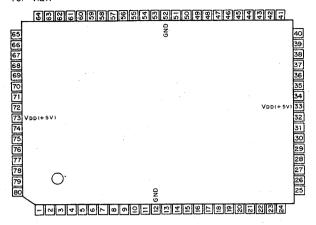
	PAO 54
	PA 1 55
	PA 2 56
i	PA 3 59
1	PA4 60
	PA5 61
30 DO	PA6 62
51 D1	PA7 63
D2	
03	PBO 64
36 D4	P81 3
D5	P82 4
36 D6	P83 3
07	P84 6
	PB5 7
9 PXC	P86
50 PX 1	PB7
- PX2	PC0 11
PX3	
46	FC, [-2
1^0	PC2 [
	PC3
48 A2	PC4 15 PC5 16
ss cs	PC6 17
14 RD	PC7 18
43 WR	7.7
1	P00 20
an RST	PD1 21
40 CLR	PO2 22
7-"	P03 23
	PD4 24
	PD5 27
	PO6 28
	PD7 29

cs	RD	WR	A2	A1	AO	MODE
0	0	1	0	0	0	PORT A - DATA BUS
0	0	1	0	0	1	PORT 8 - DATA BUS
0	0	1	0	1	0	PORTC - DATA BUS
0	0	1	0	1	1	PORT D - DATA BUS
0	0	1	1	0	0	PORT X - DATA BUS
0	0	1	1	0	1	<del></del>
0	0	1	1	1	0	
0	0	1	1	1	1	
0	1	0	0	0	0	DATA BUS PORT A
0	1	0	0	0	1	DATA BUS-PORT B
0	1	0	0	1	0	DATA BUS PORT C
0	1	0	0	1	1	DATA BUS-PORT D
0	1	0	1	0	0	DATA BUS-PORT X
0	1	.0	1	0	1	
0	1	0	1	1	0	DATA BUS -CTL REG.1
0	1	0	1	1	1	DATA BUS -CTL REG.2
1	х	х	Х	Х	X	DATA BUS; HI-Z

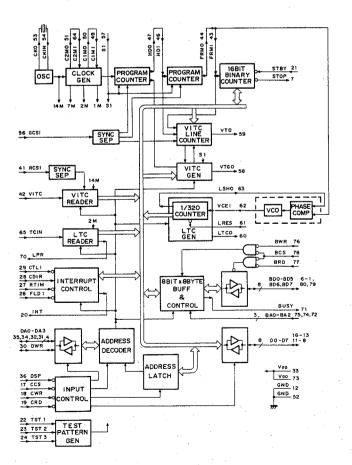
O; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z, HIGH IMPEDANCE

DO-D7; DATA BUS INPUTS/OUTPUTS
CS; CHIP SELECT INPUT
RD; READ STROBE INPUT
WR; WRITE STROBE INPUT
AO-A2; ADDRESS INPUT
RST; RESET INPUT
CLR; CLEAR INPUT
PAO-PA7; PORT A INPUTS/OUTPUTS
PBO-PB7; PORT B INPUTS/OUTPUTS
PCO-PC7; PORT C INPUTS/OUTPUTS
PDO-PD7; PORT D INPUTS/OUTPUTS
PDO-PD7; PORT D INPUTS/OUTPUTS
PXO-PX3; PORT X INPUTS/OUTPUTS

CXD1132Q (SONY) FLAT PACKAGE
CMOS TIME CODE GENERATOR/READER
- TOP VIEW -



PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL
1	1/0	DB5	17	1	ccs	33	i - i	VDD	49	1	C1MI	65		TCIN
2	1/0	DB4	18	1	CWR	34	1/0	DA1	50	0	CIMO	66	0	DCLK
3	1/0	DB3	19	ī	CRD	35	1/0	DA0	51	0	C2MO	67	0	DATA
4.	1/0	DB2	20	0	INT	36	1	DSP	52		GND	68	0	RFLD
5	1/0	DB1	21	1	STBY	37	0	DTSE	53	0	CKO	69	0	RDSY
6	1/0	DB0	22	1	TST1	38	0	VRCK	54	- 1	CKIN	70	0	LRP
7	0	STOP	23	1	TST2	39	1	SLLM	55		SLCK	71	0	BUSY
8	1/0	D7	24	1	TST3	40	0	RVDO	56	- 1	GCSI	72	1	BA2
9	1/0	D6	25	1	PON	41	1	RCSI	57		S1	73	-	V <sub>DD</sub>
10	1/0	D5	26	1	FLD1	42	1	VITC	58	0	VTGO	74	1	BA1
11	1/0	D4	27	ī	RTIM	43	T	FRMI	59	0	VTO	75	1	BA0
12	-	GND	28	-1	CDIR	44	0	FRMO	60	0	LTCO	76		8WR
13	1/0	D3	29	1	CTLI	45	0	GLSY	61	T	LRES	77	1	BRD
14	1/0	D2	30	1/0	DWR	46	1	HDI	62	1	VCEI	78	1	BCS
15	1/0	D1	31	1/0	DA3	47	0	HDO	63	0	LSHO	79	1/0	BD7
16	1/0	D0	32	1/0	DA2	48	0	VDO	64	1	C2MI	80	1/0	BD6



```
BADDRESS INPUTS
BCS B CHIP ENABLE INPUT ("L":ENABLE)
BDO-BD7
B DATA I/O
BRD B RRAD INPUT ("L":READ)
BUSY B BUSY OUTPUT
CIMI SYSTEM CLOCK INPUT ("L":WRITE)
CIMI SYSTEM CLOCK INPUT (CKIN X 1/16)
CZMC LOCK 1 OUTPUT (CKIN X 1/16)
CZMC LOCK 2 OUTPUT (CKIN X 1/8)
CCS C CHIP ENABLE INPUT ("L":ENABLE) (when DSP is low)
ADDRESS LATCH ENABLE INPUT ("L":ENABLE) (when DSP is high)
CDIR CTL DIRECTION INPUT
CKIN SYSTEM CLOCK INPUT

VIDEO SIGNAL PORMAT CKIN
SMPTE 29.97HZ 525LINE 14.318MHZ
EBU 25HZ 625LINE 14.550MHZ
CCO C CREAD INPUT ("L":READ)
CTLI CTL SIGNAL INPUT
CWR C WRITE INPUT ("L":WRITE)
DO-D7 DATA I/O (when DSP is low)
ADDRESS INPUTS
DAO-DA3
E ADDRESS INPUTS (when DSP is low)
DATA DEMODULATED SERIAL DATA OUTPUT
DCLK DEMODULATED SERIAL DATA OUTPUT
DSP DISPAY BUS SELECT INPUT
DSP CONTCOLS CCS, DAO-DA3 and DVR.
DTSE VITT DATA SEARCH FLAG OUTPUT
DWR WRITE ENABLE OUTPUT ("L":FILD 1)
FRMI FRAME SIGNAL INPUT
CKIN TYTE ENABLE OUTPUT ("L":FILD 1)
FRMI FRAME SIGNAL INPUT
GCSI COMPOSITE SYNC INPUT
GCSI COMPOSITE SYNC INPUT
GLSY LOST SYNC FLAG OUTPUT
HON HORIZONTAL SYNC INPUT
GLSY LOST SYNC FLAG OUTPUT
LIPE LTC READ REQUEST OUTPUT
LIPE LTC COUNTER RESET INPUT ("L":RESET)
LSBO SYNCHRONOUS SIGNAL OUTPUT
LIPE LTC COUNTER RESET INPUT ("L":RESET)
LSBO SYNCHRONOUS SIGNAL OUTPUT
LIPE LTC COUNTER RESET INPUT ("L":RESET)
LSBO SYNCHRONOUS SIGNAL OUTPUT
ROSY READ SYNC WORD DATA OUTPUT
RYND PIELD DATA OUTPUT
RYND PIELD DATA OUTPUT
RYND VITC READ DATA OUTPUT
RYND VITC READ DATA OUTPUT
RYND VITC READ DATA OUTPUT
```

SIGNAL DESCRIPTION

```
SI SIGNAL FORMAT SELECT INPUT

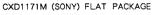
"H":NTSC/PAL-M 29.94HZ 525LINE

SLCK SELECT CLOCK INPUT

SLCK | "L" | FAL/SECAM 25HZ 625LINE

SLCK | "L" | SELECT CLOCK INPUT

SELECT | SELECT | SELECT INPUT | SELECT SELECT | SEL
```

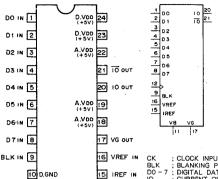


C-MOS 8-BIT D/A CONVERTER - TOP VIEW -



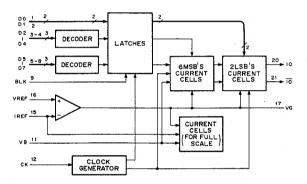
VB IN [11

CK IN 12



A.GND 14 B.GND 13

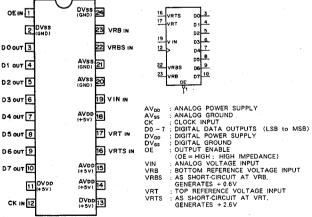
: CLOCK INPUT
: BLANKING PULSE INPUT
: DIGITAL DATA INPUT
: CURRENT OUTPUT
: INVERT CURRENT OUTPUT
: CURRENT OUTPUT
: CURRENT REFERENCE INPUT
: FOR CAPACITOR
: VOLTAGE REFERENCE INPUT



#### CXD1175AM (SONY) FLAT PACKAGE

C-MOS 8-BIT 20MSPS VIDEO A/D CONVERTER

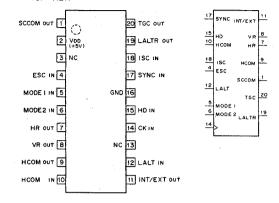




0770	INPUT SIGNAL	DATA OUTPUTS										
STEP	VOLTAGE	D7	D6	D5	D4	D3	D2	D1	D0			
0	0V (VRT)	1	1	1	1	1	1	1	1			
1	0.01V	1	1	1	1	1	1	1	0			
		1	- 1	1	-:		-:-					
: 1		÷	1	:	:	1		1	1 4			
127	1.34V	1	0	0	0	0	0	0	0			
128	1.35V	0	1	1	1	1.	1	1	1			
:			1		-	-						
:	:	1:	1 :	:		:	- 1		:			
255	2.7V (VRB)	0	0	0	0	0	0	-0	0			

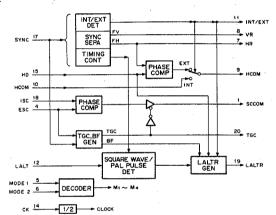
0 : LOW LEVEL 1 : HIGH LEVEL

# CXD1216M (SONY) FLAT PACKAGE C-MOS GENLOCK DRIVER - TOP VIEW -



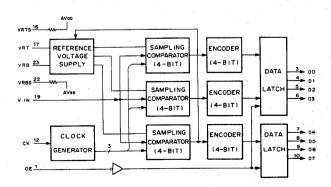
	UT	MODE	SYSTEM						
MODE1	MODE2	MODE	STSTEM						
0 0		M1.	PAL-VBS						
- 1	1 0,		PALM-VBS						
0	1	M3	PAL,SECAM-VS/SC/LALT						
1	1	M4	NTSC-VBS,NTSC-VS/SC PALM-VS/SC/LALT						

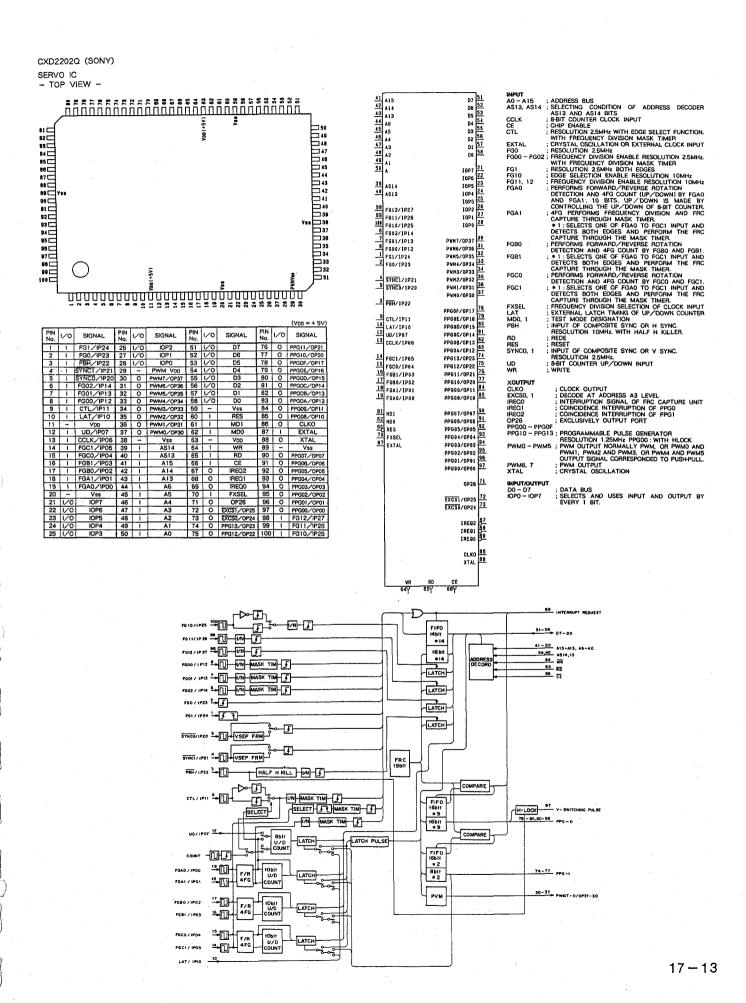
0 : LOW LEVEL 1 : HIGH LEVEL



INPUT CK ESC HCOM HD ISC LALT MODE1,2 SYNC 4fsc CLOCK INPUT SC\_COLOR BURST PHASE COMPARATE FROM CXD1217 H DRIVE FROM CXD1217 SUBCARRIER FROM CXD1217 LALT FROM REFERENCE SIGNAL GENERATOR SYSTEM SELECT SYNC FROM REFERENCE SIGNAL GENERATOR

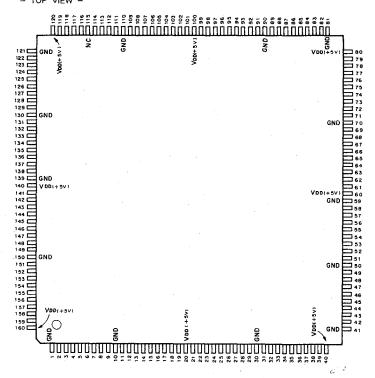
OUTPUT HCOM HR INT/EXT LALTR SCCOM TGC PHASE COMPARATOR HR WITH HD fr OF SYNC SEPARATE INTERNAL/EXTERNAL SPECIFIED LINE CHANGE RESET PHASE COMPARATOR ESC WITH ISC TRISTATE CONTROL fv OF SYNC SEPARATE





#### CXD8117P (SONY) C-MOS DIAL DATA DECODER - TOP VIEW -DATA 3 OUT 1 VDD 18 DATA 1 DATA 4 OUT 2 17 DATA 2 OUT DATA 3 16 DATA 1 OUT DATA 5 out 3 DATA S REV/FWD OUT 4 15 DATA O OUT 12 DIAL STILL JOG/SHUTTLE REV/FWD 5 GND GND 14 CK1 CK2 CK IN 6 13 JOG/SHUTTLE IN CK 1 OUT 7 12 DIAL STILL IN СК 2 OUT B 11 DIAL B IN RESTART IN 9 10 DIAL A IN DATA 0 16 0ATA 1 17 DATA 2 1 0ATA 3 2 0ATA 4 3 DATA 5 EDGE DETECTOR UP/DOWN COUNTER DIRECTION DETECTOR UP/DOWN GEN FWD/REV DETECTOR (SHUTTLE) FWD/RFV DIAL STILL 12 BUFFER RESET JOG/ 13 SHUTTLE RESTART 9 CLOCK

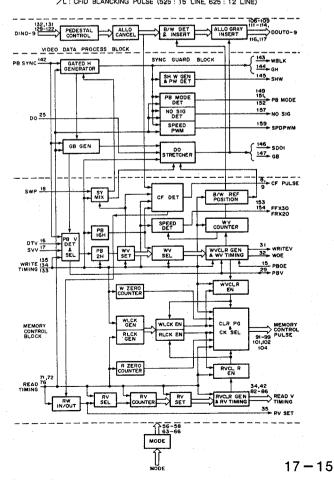
CXD8152Q (SONY) FLAT PACKAGE
C-MOS VIDEO DATA PROCESS/SYNC GUARD/MEMORY CONTROLLER
- TOP VIEW -



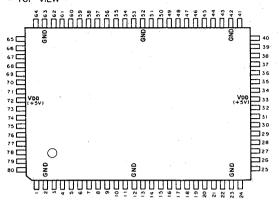
PIN	1/0	CICNAL	PIN			PIN	١		IPIN	l i	
No.	120		No.	1/0	SIGNAL	No.	1/0	SIGNAL	No.	1/0	SIGNAL
1		GND	41		GND	81		GND	121	-	GND
2	1	FWDXREY	42	1/0	RMAB	82	0	RBWLN	122	-	DIN9
3	<u> </u>	X13	43	1/0	RYCLR	83	0	COMPBLK	123		DIN8
_4_	<u> </u>	NOIPB	44	1/0	WMAB	84	0	YBLK2	124		DIN7
5	1	HEE	45	1/0	WYCLR	85	0	YBLK1	125	_	DIN6
6	1	HINPHASE	46	1/0	TDTO	86	0	ADYYBLK	126	_	DIN5
7		SHIFTINH	47		TST5	87	0	ADDTHRU	127	7	DIN4
8_	0	YSCEXEP1	48		TST4	88	0	RDIZ	128	1	DIN3
_9_	0	YSCDTFP2	49	_	TST3	89	0	RCK	129	I	DIN2
10		GND	50	[=]	GND	90	-	GND	130	-	GND
11	L	OSCON	51	1	TST2	91	0	YCLR2	131	T	DIN1
12		MOD6	52	1	TST1	92	0	INC2	132		DINO
13	-1	DT	53		T\$T0	93	0	HCLR2	133		WCK
14		DTX3	54		RLMOFF	94	0	MRCK2	134	1	WZ
15	1	PBOE	55		FLMOFF	95	0	YCLR1	135	1	ADYWZ
16	ï	DTY	56		MOD11	96	0	INC1	136	ī	WCLP
17	-	SYY	57	$\Box$	MOD10	97	0	HCLR1	137	7	YISCCMUT
18	1	SWP	58	1	MOD7	98	0	MRCK1	138	77	PRCK
19	1	FRX3020	59	-	GND	99	0	YCLR0	139	1-1	GND
20	-	VDD	60	- I	Voo	100		Voo	140	- 1	Vpp
21	0	BINS	61	1/0	BID	101	0	INCO	141		PRZ
22	0	WINS	62	1/0	BIDDIR	102	Ö	HCLR0	142		PBSYNC
23	0	BWBLK	63	1.	MOD4	103	0	DOCLR	143	ō	WBLK
24	0	WHITECHT	64		MOD3	104	0	MWCK	144	1/0	GH
25	1	DO	65	П	MOD2	105	0	WE	145	, α	SHW
26	1/0	PB16H	66		MOD1	106	0	DOUTO		1/0	SDO1
27	1/0	PB2H	67	T	JUC	107	0	DOUT1		1/0	GB
28	0	COUNTERY	68		SGBLK	108	0	DOUT2	148	0	WDIZ
29	1/0	PBY	69	П	REFOE	109	0	DOUT3	149		FBID
30	-	GND	70	- 1	GND	110	-	GND	150	-	GND
31	0	WRITEY	71		READY	111	0	DOUT4	151	1/0	FFB
32	0	WOE	72		RZ	112	0	DOUT5	152		FRB
33	1/0	WYISCID	73		R456FH	113	0	DOUT6	153	0	FF30COFF
34	0	RYISCID	74		R2BH	114	ō	DOUT7	154	0	FR30HDL
35	1/0	RYSET	75		R2FH	115	-		155	Ť	THRU2
	1/0	WENP	76	H	HCK	116	0	DOUT8	156	+	THRU1
37	1/0	RENP	77		SDATA	117	ŏ	DOUT9		10	
38	1	LEYTST	78	<del></del>	SLD	118	<del>ŏ</del> 1	SD02WD0	158		NOSIG
39	1	CLR	79	<u>.</u>	SCK ·	119	+	HOE	159	읒	PDSCONT
		Q_11			200	11131	,	not.	11551	0	SPDPWM

```
MOD 2 69
MOD 2 69
MOD 4 69
MOD 4 69
MOD 4 69
MOD 6 12
MOD 9 12
MOD 1 12
MOD
 132 DINO
                                                                                                                                                                                                                                                                                                      DOUT
131 DIN 1
129 DIN 2
                                                                                                                                                                                                                                                                                                                                108
                                                                                                                                                                                                                                                                                                                                 109
 128 DIN3
                                                                                                                                                                                                                                                                                                      DOUT 3
 127 DIN4
126 DIN5
125 DIN6
                                                                                                                                                                                                                                                                                                                                 112
                                                                                                                                                                                                                                                                                                      DOUT
 124 DIN 7
                                                                                                                                                                                                                                                                                                      DOUT 7
 122 DIN9
                                                                                                                                                                                                                                                                                                      DOUT 9
  133 WCK
                                                                                                                                                                                                                                                                                                                                 83
                                                                                                                                                                                                                                                                                                     VBLK 2
VBLK 1
B5
VBLK 1
  134
               WZ
ADVWZ
  135
 136 WCLP
                                                                                                                                                                                                                                                                                                  ADVVBLK
                                                                                                                                                                                                                                                                                                  ADDTHRU
                 PB SYNC
                                                                                                                                                                                                                                                                                                               RDIZ
   18
                SWP
                                                                                                                                                                                                                                                                                                                                 89
                                                                                                                                                                                                                                                                                                                RCK
  25 DO
137 VISCOMUT
                                                                                                                                                                                                                                                                                                         DOCLR 103
   FWDXREV
3 x 13
                                                                                                                                                                                                                                                                                                         HCLRO 97
                                                                                                                                                                                                                                                                                                         HCLR1 93
HCLR2 93
VCLR 0 99
  X13
ANOIPB
HEE
HINPHASE
7
SHIFTINH
                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                         VCLR 1
                                                                                                                                                                                                                                                                                                         VCLR 2
INC 0
  SHIFT
DT
DTX3
                                                                                                                                                                                                                                                                                                                                 101
   16 DTV
                                                                                                                                                                                                                                                                                                             INC 2
   17
29
PBV
                                                                                                                                                                                                                                                                                                                                   105
                                                                                                                                                                                                                                                                                                            MWCK
  15 PBOE
                                                                                                                                                                                                                                                                                                         MRCK I
                                                                                                                                                                                                                                                                                                                                   98
94
  67 JUC
68 SGBLK
69 REFOE
71 READV
                                                                                                                                                                                                                                                                                                                                     143
                                                                                                                                                                                                                                                                                                             WBLK
                                                                                                                                                                                                                                                                                                                  SHW
                                                                                                                                                                                                                                                                                                                                     146
                                                                                                                                                                                                                                                                                                               SDO
   72
RZ
                                                                                                                                                                                                                                                                                                                                     118
                                                                                                                                                                                                                                                                                                   spozwno
  73
R456FH
R28H
                                                                                                                                                                                                                                                                                                                                   147
                                                                                                                                                                                                                                                                                                                worz
  75 R2FH
                                                                                                                                                                                                                                                                                                                FRID
    76
                                                                                                                                                                                                                                                                                                                  FFB
                                                                                                                                                                                                                                                                                                                                   151
                  нск
                                                                                                                                                                                                                                                                                                                                    152
                  FRX3020
                                                                                                                                                                                                                                                                                                                  FRB
                                                                                                                                                                                                                                                                                                                                   157
158
   38
39
54
                                                                                                                                                                                                                                                                                                            NOSIG
                  LEVTST
                  CLR
                                                                                                                                                                                                                                                                                                                                     159
  54
RLMOFF
                                                                                                                                                                                                                                                                                              SPDPWM
FF30COFF
                                                   154
                                                                                                                                                                                                                                                                                                  FR30HDL
                  THRU 2
                                                                                                                                                                                                                                                                                                       RBWLN
```

```
OUTPUT
ADDTHRU
ADDTHRU
ADDVBLK
ADVBLK
Y ADD CONTROL
BWBLK
L: BLACK & WHITE REF BLANKING PULSE
COMPBLK
COMPBLK
COMPBLK
L: BLACK & WHITE REF BLANKING PULSE
COMPBLK
COUNTERV
COUNTERV
COUNTERV / RNC
COUNTERV
COUNTERV
COUNTERV
COUNTERV
COUNTERV
COUNTERV
COUNTER LANKING
COUNTERV
COUNTERV
COUNTERV
COUNTERV
COUNTERV
COUNTER V / RNC
COUNTERV
COUNTER V / RNC
COUNTERV
COUNTERV
COUNTERV
COUNTERV
COUNTER LEAR PULSE
DOUTO - 9
COUNTERV
COUNTER CLEAR PULSE
COUNTER CLOCK
MRCK1. 2
READ MEMORY LINE ADDRESS COUNTER CLEAR PULSE
COUNTER CLEAR PULSE
COUNTERV
COUNTER MEMORY CLOCK
COUNTER CLEAR PULSE
COUNTER CLOCK
COUNTER CLEAR PULSE
COUNTER CLOCK
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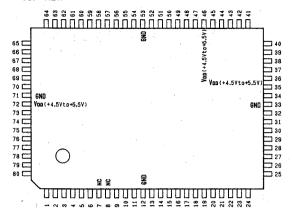
CXD8160Q (SONY) FLAT PACKAGE C-MOS DIGITAL CHROMA EXPANDER - TOP VIEW -



PIN A	SSIGN	MENT	,								$(V_{DD} = + 5V)$
PIN NO.	1/0	SIGNAL	PIN NO.	1/0	SIGNAL	PIN NO.	1/0	SIGNAL	PIN NO.	1/0	SIGNAL
1	T	TLOAD	21	- 1	L:DT	41	0	RY1	61	0	BY6
2	-	GND	22	1	TRST	42	-	GND	62	0	BY7
3	1	CK	23	-	GND	43	0	RY2	63	-	GND
4	1	LBID	24	1	CINO ·	44	0	RY3	64	0	BY8
5	T	LCBLK	25		CIN1	45	0	RY4	65	0	BY9
6	1	LVBLK	26	1	CIN2	46	0	RY5	66	T	LENBY
7		LBY	27	1	CIN3	47	.0	RY6	67		HSYNC
8	T	XTRE	28		CIN4	48	0	RY7	68	1	DTSTB
9	T	XTWE	29	1	CIN5	49	0	RY8	69		SLD
10	0	TRO0	30	1	CIN6	50	0	RY9	70	0	S OUT
11	0	TRO1	31	1	CIN7	51	1	LENRY	71	1	S DATA
12	-	GND	32	T	CIN8	52	-	GND	72	1	SCK
13	1	LFRCOMB	33	-	Voo	53	1	TRIO	73	-	Voo
14	T	LCOMB OFF	34	T	CIN9	54	I	XMM	74	1	XTST0
15	1	L625	35	1	TŘII	55	0	BY0	75	_	XTST1
16	1	LC MUTE1	36	ī	TRI2	56	0	BY1	76	1	XTST2
17	ı	LC MUTE2	37	T	TRI3	57	0	BY2	77	1	XTST3
18	1	LC MPLX	38	J	TRI4	58	0	BY3	78	-	-
19	1	L3S4	39	1	TRI5	59	. 0	BY4	79	0	ENS0
20	1	LAP OFF	40	0	RY0	60	0	BY5	80	0	ENS1

COMPLEXED CHROMA DATA (10 bit)
SYSTEM CLOCK
TEST MODE B-1/R-Y STROBE
HORIZONTAL SYNC
L: COMPRESS BY 3/4
LIMITER LEVEL (H: 12.5 %, L: 5.25 %)
I: SIN (X) /X CORRECTION OFF
L: BIDIREX
COMPLEXED CHROMA DATA POSITION (H: R-Y, L: B-Y)
COMPOSITE BLANKING
L: COMB FLITER OFF MODE
L: COMPLEX
L: COMPLEX
L: CHROMA DATA MUTE
L: DYNAMIC TRACKING MODE
B-Y ENABLE
R-Y ENABLE
R-Y ENABLE
R-Y ENABLE
L: COMB FILTER ON MODE
V BLANKING
SERIAL CLOCK
SERIAL DATA
SERIAL LATCH PULSE
TEST MODE
TEST MODE INPUT
CIMO - CIN9 :
CK
DTSTB
HSYNC
L3S4
L625
LAP OFF
LBID
LBY
LCBLK
LCOMB OFF
LCMPLX
LC MUTE1, 2:
LDT
LENBY
LENBY
LFRCOMB
LYBLK
SCK
SC DATA
SLD
TILOAD
TRIO - TRI5
TRST, XMM
XTRE
XTSTO - 3
XTWE 24 CINO 26 CINI 26 CINI 27 CINI 28 CINI RY2 43 RY3 44 RY4 45 RY5 46 RY5 47 RY7 48 RY7 48 29 30 31 32 CINS CINE CIN7 RYB 34 CINS RYS 3 CK 5 LCBLK LVBLK 7 LBY 13 LFRCOMB 14 LCOMBOR 15 L625 55 871 56 872 57 873 58 874 59 875 60 876 61 877 62 878 64 878 65 .. LCOMBOFF L625 18 LCMPLX 19 L3S4 LAPOFF LAPOFF
LCMUTE 1
17 LCMUTE 2
51 LENRY
66 LENBY
HSYNC ENSO 79 OUTPUT BY0 - BY9 ENSO, 1 RY0 - RY9 SOUT TROO, 1 ENS 1 : BY CHROMA DATA or COMPLEXED CHROMA DATA COMPRESS CHROMA EDGE DATA RY CHROMA DATA or COMPLEXED DATA for D1 INTERFACE SERIAL DATA I TEST MODE HSYNC DTSTB LBID 68 4 21 LOT 71 72 69 70 S DATA SOUT SCK SLD 53 35 36 37 38 39 74 75 TRIO TRII TRI2 TR00 10 TRI3 TRI4 TRI5 XTSTO XTSTI XTST3 75 XTST1
76 XTST3
77 XTST4
8 XTRE
9 XTWE
1 TLOAG
54 XMM

CXD8176Q (SONY)
C-MOS GATE ARRAY
- TOP VIEW -



									(Vob	= + 4.	5V to +5.5V)
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	1/0	DOL.	21	1/0	D7R	41	1/0	D6M	61	1	A10L
2	1	WRL	22	1/0	D6R	42	0	D5M	62	-1	A9L
3	1	RDL	23	1/0	D5R	43	1/0	D4M	63	-	A8L
4	0	WAIL	24	1/0	D4R	44	1/0	D3M	64		A7L
5	1	CSL	25	0	D3R	45	0	D2M	65		A6L
6	_	CKL	26	1/0	D2R	46	-	Voo	66		A5L
7	-	NC	27.	1/0	DIR	47	1/0	D1M	67		A4L
8	-	NC	28	1/0	DOR	48	1/0	DOM	68		A3L
9	_	A10R	29	1	WRR	49	0	AOM	69	L.	A2L
10	_	A9R	30		RDR	50	0	A1M	70	1	A1L
11	1	A8R	31	0	WAIR	51	0	A2M	71	-	GND
12	1	GND	32		CSR	52	0	ASM	72	- "	VDD
13	1	A7R	33	-	GND	53	-	GND	73	t	AOL
14	1	A6R	34	-	VDD	54	0	A4M	74	1/0	D7L
15	7	A5R	35	T	CKR	55	0	A5M	75	1/0	D6L
16		A4R	36	l l	CKT	56	0	A6M	76	1/0	D5L
17	1	A3R	37	0	WEM	57	0	A7M	77	1/0	D4L
18	1	A2R	38	0	OEM	58	0	M8A	78	1/0	D3L
19	1	AIR	39	0	CEM	59	0	A9M	79	1/0	D2L
20	- 1	AOR	40	1/0	D7M	60	0	AIOM	80	1/0	D1L

CXD8177Q (SONY)

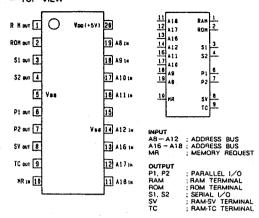
DT Y/C DELAY DETECTOR - TOP VIEW -

3	YSH CSH	AB0 AB1	35 36
8 9 10	CSB RDB A0	AB2 AB3 AB4 AB5	37 38 40 41
25 26	LAT1 LAT2	A86 A87 A88	43
5 24 27 28	CLCK EN REST TEST	800 801 802 603 804 805 806	12 13 14 16 18 19
		BD7 SIGN	21 34

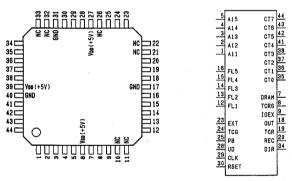
					(Ypp=+5V)
PIN NO.	1/0	SIGNAL	PIN NO.	I/0	SIGNAL
ī	-	NC	23	-	NC
2	1	YSH	24	I	EN
3	1	CSH	25	I	LAT1
4	-	You	26	I	LAT2
5	I	CLCK	27	I	REST
6	-	GND	28	I	TEST
7	-	NC	29	-	NC
8	1	CSB	30	-	NC
9	I	RDB	31		- NC
10	1	- A0	32	_	GND
11	-	NC	33	T	NC
12	0	BD0 ·	34	0	SIGN
13	0	BD1	35	0	AB0
14	0	802	36	0	AB1
15	-	YDD	37	0	AB2
16	0	8D3	38	0	A83
17	-	GND	39	-	Von
18	0	BD4	40	0	A84
19	0	BD5	41	0	AB5
20	0	806	42	0	AB6
21	0	807	43	0	AB7
22	1 =	NC	44	0	88A



CXD8310M (SONY) C-MOS GATE ARRAY



CXD8311Q (SONY) FLAT PACKAGE TIME CODE u-COM INTERFACE - TOP VIEW -



										(	$(V_{DD} = + 5V)$
PiN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	5	SIGNAL.	PIN No.	1/0	SIGNAL
1	1	A11	12	T	FL1	23	_	EXT	34	0	DIR
2	1.	A12	13		FL2	24	1	TCG	35	0	CTO
3	1	A13	14		FL3	25	1	28	36	0	CT1
4	1	A14	15	1	FL4	26	-	NC	37	0	CT2
5	1	A15	16		FL5	27	-	Voo	38	0	СТЗ
6	- 1	VDD	17	-	GND	28	1	UD	39	-	VDD
7	0	DRAM	18	0	OUT	29	1	CLK	40	-	GND
8	0	TCRG	19	0	TCR	30	1	RSET	41	0	CT4
9	0	IOEX	20	0	REC	31	-	GND	42	0	CT5
10	-	NC	21	-	NC	32	-	NC	43	0.	CT6
11	-	NC	22	-	NC	33	Ι-	NC	44	0	CT7

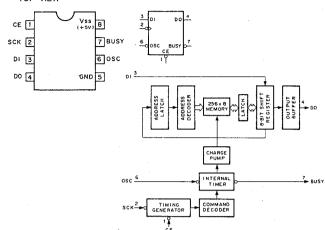
INPUT
A11 - A15
CLK
EXT, TCG, PB
FL1 - FL5
RSET
UD

ADDRESS BUS
EDIT CTL
TIME CODE INPUT
TIME CODE SELECT SWITCH
RESET PULSE
TAPE DIRECTION

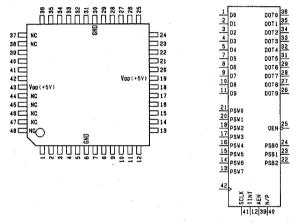
CUTPUT
CTO - CT7
DIR
DRAM, TCRG, IOEX
CHIP SELECT
OUT, TCR, REC
SELECTED TIME CODE

CXK1013P (SONY)

MNOS 2K (256x8)-BIT NON-VOLATILE MEMORY - TOP VIEW -

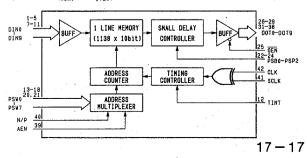


CXK1203Q (SONY) C-MOS DIGITAL LINE MEMORY TOP VIEW -

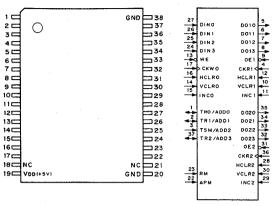


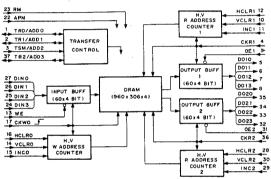
										. (	(VD0 = + 5V)
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1		D0	13	ı	PSW7	25	1	ŌĒŇ	37		N,C
2	I	. D1	14		PSW6	26	0	DOT9	38	-	N.C
3	1	D2	15		PSW5	27	0	DOT8	39	1	AEN
4		D3	16	I	PSW4	28	0	DOT7	40	1	N/P
5	1	D4	17		PSW3	29	0	DOT6	41	1	SCLK
6	-	GND	18	_	PSW2	30	-	GND	42	1	CLK
7	1	D5	19	-	VDD	31	0	DOT5	43		VDD
8		D6	20	-	PSW1	32	0	DOT4	44	-	N.C
9	T T	D7	21	1	PSW0	33	0	DOT3	45	-	N.C
10		D8	22	_	PSB2	34	0	DOT2	46	-	N.C
11		D9	23		PSB1	35	0	DOT1	47	-	N.C
12	1	TINIT	24	1 1	DODO	26		DOTO	40		110

AEN :LINE MEMORY SELECT CLOCK DINO-DIN9 VIDEO DATA DUTPUT M/P VIDEO DATA DUTPUT M/P VIDEO DATA DUTPUT M/P VIDEO DATA DUTPUT SELECT (1 BITXH) PSW0-PSW7 DELAY STEP SELECT(1 BITXH) PSW0-PSW7 DELAY STEP SELECT(1 BITXH) TEST



# CXK1206AM (SONY) FLAT PACKAGE C-MOS VIDEO FIELD MEMORY (960-COLUMNx306-ROWx4-BIT) - TOP VIEW -



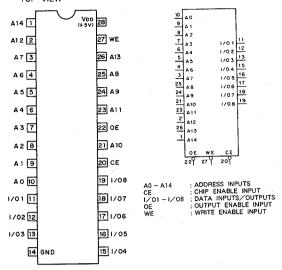


PIN	SIGNAL	DESCRIPTION
1	mpo /appo	W PORT 0 TRANSFER SYNC I/O, ADDRESS 0 INPUT
2	mp1/App1	R PORT 1 TRANSFER SYNC I/O, ADDRESS 1 INPUT
3	TSM/ADD2	
4	CKR1	R PORT 1 SHIFT SIGNAL INPUT
	DO10	R PORT 1 DATA 0 OUTPUT
5 6 7	D011	R PORT 1 DATA 1 OUTPUT
7	DO12	R PORT 1 DATA 1 OUTPUT R PORT 1 DATA 2 OUTPUT
8	DO13	R PORT 1 DATA 3 OUTPUT
	OE1	R PORT 1 OUTPUT ENABLE INPUT
10	VCLR1	R PORT 1 VERTICAL CLEAR INPUT
11	INCl	R PORT 1 LINE INCREMENT INPUT
12	HCLR1	R PORT 1 HORIZONTAL CLEAR INPUT
13	WE .	W PORT 0 WRITE ENABLE INPUT
		W PORT 0 VERTICAL CLEAR INPUT
15		W PORT 0 LINE INCREMENT INPUT
	HCLR0	W PORT O HORIZONTAL CLEAR INPUT
	CKM0	W PORT 0 SHIFT SIGNAL INPUT
18	NC	(no connection)
19	VDD	+5V INPUT
20		GND
21	NC	(no connection)
22	APM	ADDRESS PRESET MODE INPUT
23	RMM	RECURSIVE MODE ENABLE INPUT
		W PORT 0 DATA 3 INPUT W PORT 0 DATA 2 INPUT
	DIN2	W PORT 0 DATA 1 INPUT
26	DINI	W PORT 0 DATA 1 INPUT
27	DINO HCLR2	R PORT 2 HORIZONTAL CLEAR INPUT
28	INC2	R PORT 2 HORIZONIAL CHEAR INTOI
29 30		R PORT 2 VERTICAL CLEAR INPUT
31	OE2	R PORT 2 OUTPUT ENABLE INPUT
32	DO23	R PORT 2 DATA 3 OUTPUT
33		R PORT 2 DATA 2 OUTPUT
34	DO22 DO21	R PORT 2 DATA 1 OUTPUT
35	DO21	R PORT 2 DATA 0 OUTPUT
36		R PORT 2 SHIFT SIGNAL INPUT
37	TR2/ADD3	R PORT 2 TRANSFER SYNC I/O, ADDRESS 3 INPUT
38	GND	GND
	J.1.D	to the second se

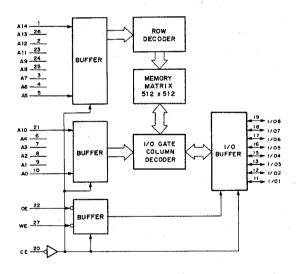
ODE SELECTION										
CONTROL INPUTS TS			,TR/A	DD	MODE					
RM	APM	TSM	TR 0-2	ADD 0-3	MODE					
0	0	0	OUT	-	NON RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT					
0	0	1	IN~ PUT	-	NON RECURSIVE MODE, TRANSPER SYNCHRONOUS MODE INPUT					
0	i	-	-	IN- PUT	NON RECURSIVE MODE, ADDRESS PRESET MODE					
i	0	0	OUT PUT	-	RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT					
1	0	1	IN- PUT	-	RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE INPUT					

0:LOW LEVEL 1:HIGH LEVEL

#### CXK58257AM-10L (SONY) FLAT PACKAGE C-MOS 256K (32768x8)-BIT STATIC RAM - TOP VIEW -

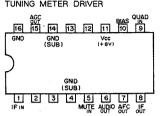


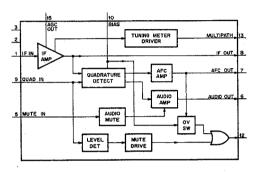
CE	OE	WE	MODE	I/O TERMINAL	
1	×	×	NOT SELECT	HIGH IMPEDANCE	
0	1	1	OUTPUT DISABLE	HIGH IMPEDANCE	0 : LOW LEVEL
0	0	1	READ	OUTPUT DATA	1 : HIGH LEVEL
0	×	0	WRITE	INPUT DATA	X: DON'T CARE



HA12411 (HITACHI)

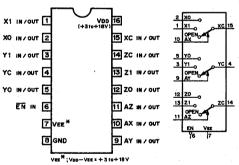
FM IF AMPLIFIER
QUADRATURE DETECT
AUDIO AMPLIFIER
MUTING AFC AGC TUNING METER DRIVER





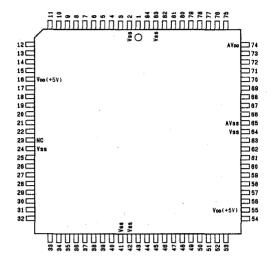
HD14053BFP (HITACHI) FLAT PACKAGE UPD4053BC (NEC)

C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXERS/DEMULTIPLEXERS - TOP VIEW -

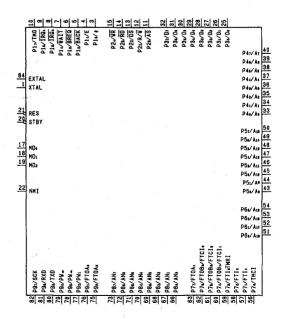


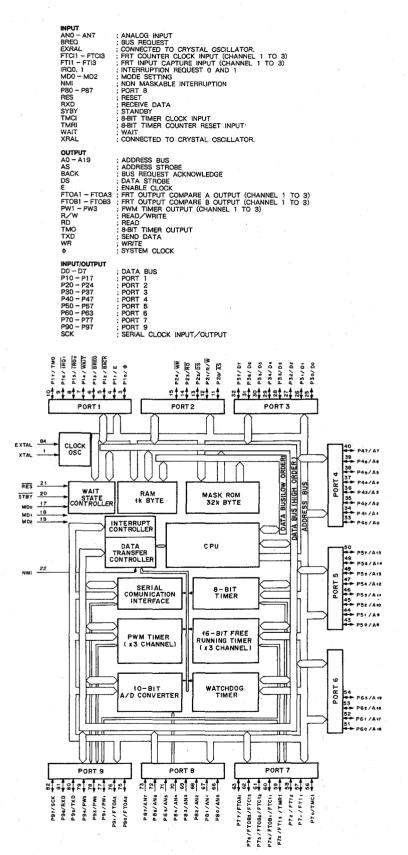
		T. INPUTS	ON		
	EN	A (X,Y,Z,)	CHANNEL		
O; LOW LEVEL	0	0	0		
1 HIGH LEVEL	0	1	1		
X DON'T CARE.	1	Х	OPEN		

HD6475328CP10 (HITACHI) 16-BIT CPU - TOP VIEW -



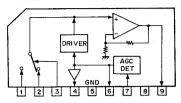
								(VDD = + 5V)
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	_	XTAL	29	0	P34/D4	57	1/0	P71/FTI1
2	- 1	Vss	30	5	P35/D5	58	1/0	P72/FTI2
3	1/0	P10/ф	31	0	P36/D6	59	1/0	P73/FTI3/TMRI
4	0	P11/E	32	1/0	P37/D7	60	1/0	P74/FT0B1/FTCI1
5	1/0	P12/BACK	33	0	P40/A0	61	1/0	P75/FT0B2/FTCI2
6	1/0	P13/BREQ	34	1/0	P41/A1	62	1/0	P76/FTOB3/FTCI3
7	1/0	P14/WAIT	35	1/0	P42/A2	63	0	P77/FTOA1
8	1/0	P15/IRQ0	36	5	P43/A3	64	~	Vss
9	1/0	P16∕IRQ1	37	0	P44/A4	65	-	AVss
10	1/0	P17/TMO	38	1/0	P45/A5	66	1/0	P80/AN0
11	5	P20/AS	39	1/0	P46/A6	67	1/0	P81/AN1
12	1/0	P21/R/₩	40	1/0	P47/A7	68	1/0	P82/AN2
13	1/0	P22/DS	41	_	Vss	69	1/0	P83/AN3
14	1/0	P23/RD	42	-	Vss	70	1/0	P84/AN4
15	1/0	P24/WR	43	0	P50/A8	71	1/0	P85/AN5
16	-	Vcc	44	5	P51/A9	72	1/0	P86/AN6
17		MD0	45	5	P52/A10	73	1/0	P87/AN7
18	-	MD1	46	0	P53/A11	74	-	AVcc
19		MD2	47	5	P54/A12	75	1/0	P90/FTQA2
20	1	STBY	48	0	P55/A13	76	1/0	P91/FTOA3
21		RES	49	0	P56/A14	77	1/0	P92/PW1
22	1	NMI	50	1/0	P57/A15	78	1/0	P93/PW2
23	-	. NC	51	1/0	P60/A16	79	1/0	P94/PW3
24	- 1	Vss	52	1/0	P61/A17	80	1/0	P95/TXD
25	1/0	P30/D0	53	1/0	P62/A18	81	1/0	P96/RXD
26	1/0	P31/D1	54	1/0	P63/A14	82	1/0	P97/SCK
27	<b>∨</b>	P32/D2	55	ΕΞ.	V∞	83	-	Vss
28	1/0	P33/D3	56	0	P70/TMCI	84	1	EXTAL





LA7205 (SANYO)

AGC AMP, INPUT SELECT, AGC DET, COMPARATOR — SIDE VIEW —



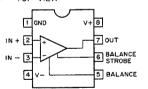
LM2903DQ (RAYTHEON) LM2903M (RAYTHEON) FLAT PACKAGE LM2903P (TI) LM2903PS (TI) FLAT PACKAGE UPC393G2 (NEC) FLAT PACKAGE DUAL VOLTAGE COMPARATORS - TOP VIEW -



LM311PS (TI) FLAT PACKAGE

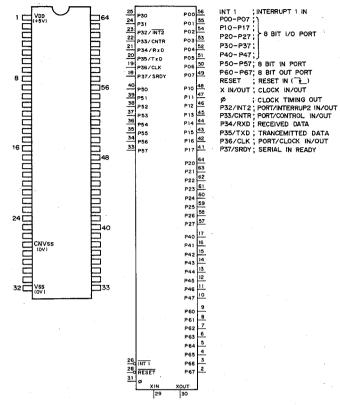
VOLTAGE COMPARATOR WITH STROBE

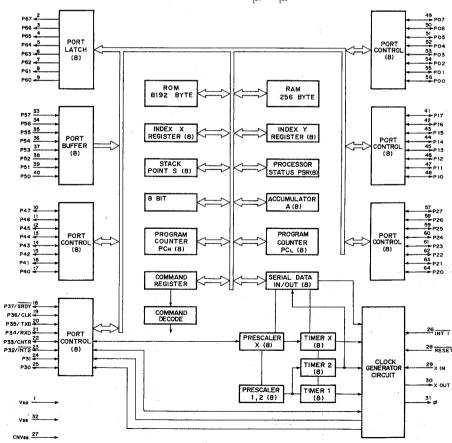
- TOP VIEW -



M50747H-XXXSP

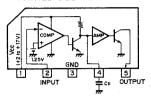
C-MOS PROCESS 8-BIT ONE CHIP MICROCOMPUTER - TOP VIEW -



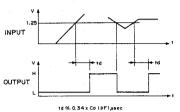


M51957BL (MITSUBISHI)

VOLTAGE DETECT DELAY
- PRINTED SIDE VIEW -

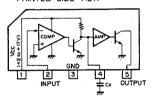


TIMING CHART

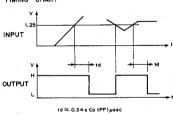


M51958BL (MITSUBISHI)

VOLTAGE DETECT DELAY
- PRINTED SIDE VIEW -

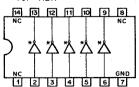


TIMING CHART



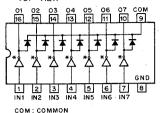
M54516P (MITSUBISHI)

INVERTER WITH OPEN-COLLECTOR (DARLINGTON-CONNECTED TRANSISTOR ARRAY) - TOP VIEW -



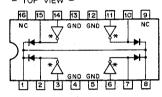
M54523P (MITSUBISHI)

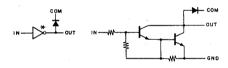
BIPOLAR TRANSISTOR ARRAY WITH OPEN COLLECTOR - TOP VIEW -



M54532P (MITSUBISHI)

DARLINGTON TRANSISTOR ARRAY WITH CLAMP DIODE – TOP VIEW –  $\,$ 



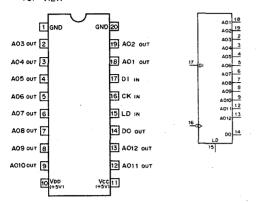


MB4002PF (FUJITSU) FLAT PACKAGE

HIGH SPEED VOLTAGE COMPARATOR - TOP VIEW -

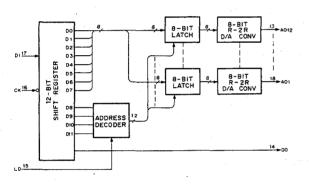
1 GND (+12V) 7 7 NC 6 4 YEE (-6V) NC 5

#### MB88341PFV (FUJITSU) FLAT PACKAGE C-MOS 8-BIT D/A CONVERTER TOP VIEW -



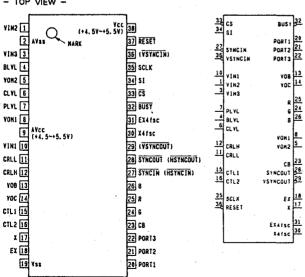
A01 - A012 CK DI DO LD

: 8-BIT D/A OUTPUTS
: CLOCK INPUT
: SERIAL DATA INPUT
: DATA OUTPUT
: DATA LOAD CONTROL INPUT (H:LOAD)

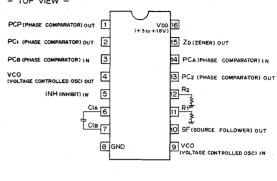


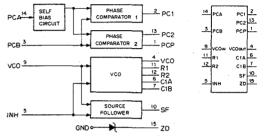
## MB90061-111 (FUJITSU)

C-MOS TV DISPLAY CONTROLLER - TOP VIEW -

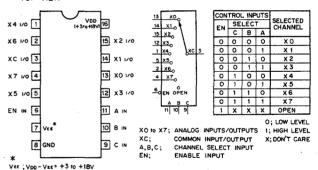


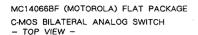
# MC14046BF (MOTOROLA) FLAT PACKAGE C-MOS PHASE LOCKED LOOP - TOP VIEW -

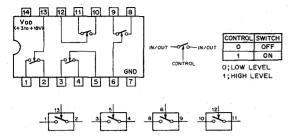




#### MC14051BF (MOTOROLA) FLAT PACKAGE C-MOS 8-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER TOP VIEW -

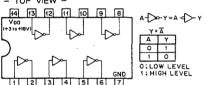






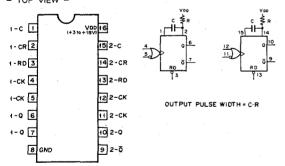
#### MC14069UBF (MOTOROLA) TC4069UBP (TOSHIBA)

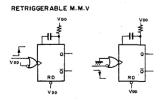
C-MOS INVERTER - TOP VIEW -

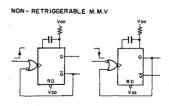


#### MC14538BF (MOTOROLA) FLAT PACKAGE

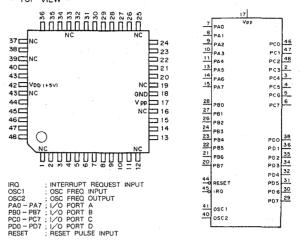
C-MOS DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR – TOP VIEW –



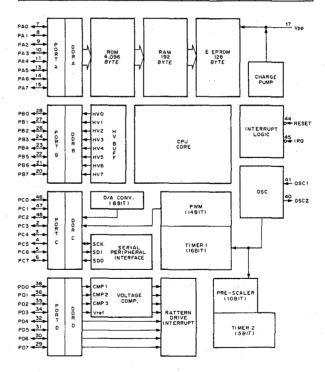




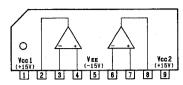
#### MC68HC05N4 (MOTOROLA) C-MOS 8-BIT MICROPROCESSOR - TOP VIEW -



						_					
PIN NO.	V	SYMBOL	PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL.
1	1	NC	13	1/0	PA5	25	-	NC	37	-	NC
2	1/0	PC3	14	1/0	PA6	26	1/0	PB2	38	1/0	PD0
3	7	PC4	15	1/0	PA7	27	1/0	PB1	39	-	NC
4	0	PC5	16	-	NC	28	1/0	PB0	40	0	OSC2
5	1/0	PC6	17	111	VPP	29	1/0	PD7	41	1	OSC1
6	5	PC7	18	-	GND	30	1/0	PD6	42	<del>-</del> -	VDD (+5V)
7	0	PAO	19	_	NC	31	1/0	PD5	43	-	NC ·
8	1/0	PA1	20	1/0	P87	32	1/0	PD4	44	1	RESET
9	1/0	PA2	21	1/0	PB6	33	-	NC	45	_	. IRQ
10	0	PA3	22	1/0	PB5	34	1/0	PD3	46	1/0	PC0
11	0	PA4	23	1/0	PB4	35	1/0	PD2	47	1/0	PC1
12	_	NC	24	1/0	PB3	36	1/0	PD1	48	1/0	PC2



NJM2068SD (JRC) LOW NOISE OPERATIONAL AMPLIFIER - SIDE VIEW -



NJM360M (JRC) FLAT PACKAGE HIGH SPEED VOLTAGE COMPARATOR (TTL OUTPUT) - TOP VIEW -



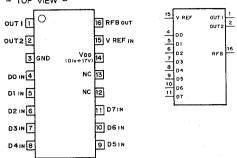
NJM4565M-A (JRC) FLAT PACKAGE RC4558DD (RAYTHEON) RC4558M (RAYTHEON) FLAT PACKAGE RC4560D (RAYTHEON) RC4560M (RAYTHEON) FLAT PACKAGE RC5532DD (RAYTHEON) UPC4558C (NEC)

DUAL OPERATIONAL AMPLIFIER - TOP VIEW -

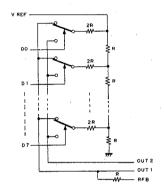


NJU8001M (JRC) FLAT PACKAGE

C-MOS 8-BIT MULTIPLING D/A CONVERTER - TOP VIEW -



DO - D7 ; DATA INPUTS RFB ; FEED BACK INPUT



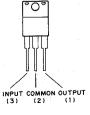
RC4556MA (RAYTHEON) FLAT PACKAGE

OPERATIONAL AMPLIFIER
(WIDE BAND, DECOMPENSATED)
- TOP VIEW -



RC7805FA (RAYTHEON) + 5V RC7809FA (RAYTHEON) + 9V

POSITIVE VOLTAGE REGULATOR - FRONT VIEW -



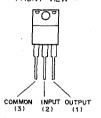


RC78L05A (RAYTHEON) + 5V RC78L09A (RAYTHEON) + 9V RC7812FA (RAYTHEON) + 12V POSITIVE VOLTAGE REGULATOR - FRONT VIEW -



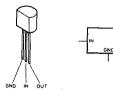


RC7905FA (RAYTHEON) - 5V RC7909FA (RAYTHEON) - 9V NEGATIVE VOLTAGE REGULATOR - FRONT VIEW -

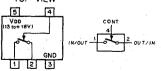




RC79L05A (RAYTHEON) - 5V NEGATIVE VOLTAGE REGULATOR (100mA)



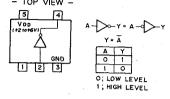
SC14S66F (MOTOROLA) FLAT PACKAGE C-MOS BILATERAL ANALOG SWITCH - TOP VIEW -



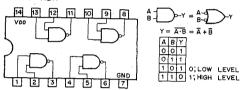
	CONT	SWITCH	7	
	0	OFF	0 ; LOW	LEVEL
ĺ	1	ON	1 ; HIGH	LEVEL

#### TC7S04F (MOTOROLA) FLAT PACKAGE

C-MOS INVERTER - TOP VIEW -

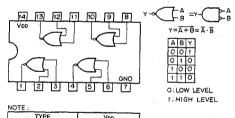


SN74HC00ANS (TI) FLAT PACKAGE C-MOS QUAD 2-INPUT NAND GATE - TOP VIEW --



TYPE	Voo
TC74AC00P TC74AC00F	+2 to +5.5V
MC74HCT00N 74ACT00PC	+5V
OTHER TYPES	+2 to +6V

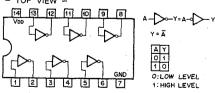
SN74HC02ANS (TI) FLAT PACKAGE C-MOS QUAD 2-INPUT NOR GATE - TOP VIEW -



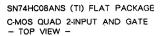
TE:	
TYPE	Voo
TC74AC02F	+2 to +5.5V
OTHER TYPES	+2 to +6V

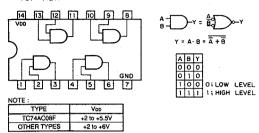
SN74HC04ANS (TI) FLAT PACKAGE SN74HCU04ANS (TI) FLAT PACKAGE



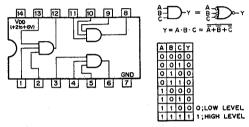


OTE:	
TYPE	Vop
74ACT04 TYPES 74HCT04 TYPES	+5V
TC74AC04F	+2 to +5.5V
TC74ACT04F	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

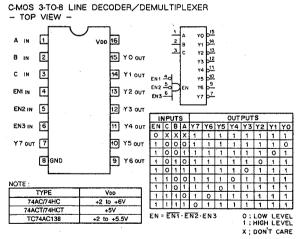




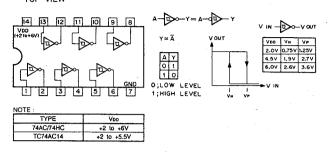
SN74HC11ANS (TI) FLAT PACKAGE C-MOS 3-INPUT POSITIVE-AND GATE



SN74HC138ANS (TI) FLAT PACKAGE C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER

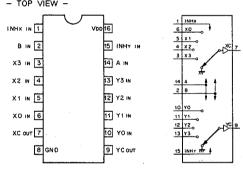


SN74HC14ANS (TI) FLAT PACKAGE C-MOS SCHMITT TRIGGER INVERTER - TOP VIEW --



SN74HC153ANS (TI) FLAT PACKAGE

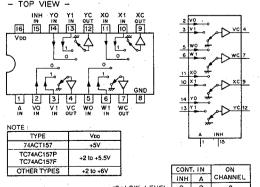
C-MOS DUAL 4-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER - TOP VIEW -

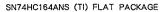


TYPE			CONTROL IN			
EXCEPT FOL TYPE	+2 to +6V	INH	В	A	CHANNEL	
74ACT153PC	+5V	0	0	0	0	
74ACT153SJ	151	1	ō	1	1	
TC74AC153P	+2 to +5.5V	0	1	0	2	
		0	1	1	3	
		1.1	Х	Х	GND	
		0:1	ow	LEVE	L	
	*	1:1	HIGH	LEV	EL	
		x:	OON"	T CA	RE	

SN74HC157ANS (TI) FLAT PACKAGE

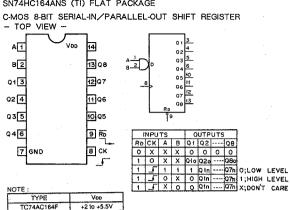
C-MOS QUAD 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER - TOP VIEW -

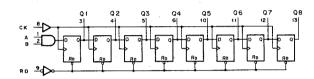




+2 to +5.5

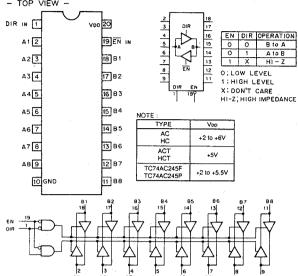
OTHER TYPES





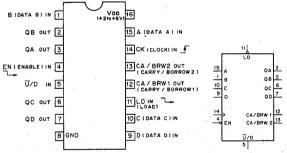
#### SN74HC245ANS (TI) FLAT PACKAGE

C-MOS BILATERAL BUS TRANSCEIVERS WITH 3-STATE OUTPUTS - TOP VIEW -



#### SN74HC191NS (TI) FLAT PACKAGE

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY UP/DOWN COUNTER - TOP VIEW -



		<u> </u>	
MODE	SELEC	TION	
CON	TROL	INPUTS	MODE
LD	EN	Ū/D	WOOL
0	х	×	PRESET (ASYNCHRONOUS)
1	1	X	NO COUNT
1	0	0	UP COUNT
1	0	1	DOWN COUNT

CA / BRW OUTPUTS

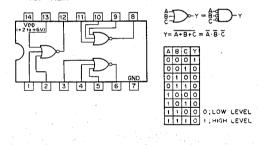
O; LOW LEVEL

COUNT					
COONT	QD	QC	ОВ	QA	
0	0	0	0	0	
1	0	0	0	1	1
2	0	0	1	0	1
3	0	0	1	1	
4	0	. 1	0	0	
5	0	1	0	1	
6	0	1	_	0	
7	0	1	1	1	o
8	1	0	0	0	0
9	1	0	0	1	Ď
10	1	0	1	0	
11	1	0	1	1	١.
12	1	1	0	0	
13	1	1	0	1.	
14	1	1	1	0	
15	- 1	1	1.	1	1

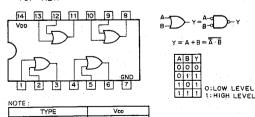
CA/BRW1 OUTPUT IS HIGH WHEN COUNT IS "15" AT UP-COUNT OR WHEN COUNT IS "0" AT DOWN COUNT.

CA/BRW2 OUTPUT IS LOW WHEN BOTH THE CLOCK AND EN INPUTS ARE LOW AND CA/BRW1 OUTPUT IS HIGH.

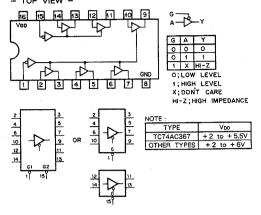
SN74HC27ANS (TI) FLAT PACKAGE C-MOS 3-LINE POSITIVE-NOR GATE - TOP VIEW -



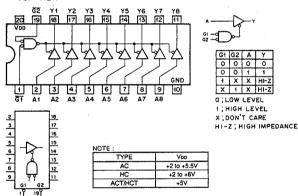
SN74HC32ANS (TI) FLAT PACKAGE C-MOS 2-INPUT OR GATE - TOP VIEW -



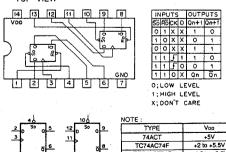
TC74AC3 +2 to +5.5\ OTHER TYPES +2 to +6V SN74HC367ANS (TI) FLAT PACKAGE C-MOS BUS DRIVER WITH 3-STATE OUTPUTS - TOP VIEW -



SN74HC541ANS (TI) FLAT PACKAGE C-MOS BUFFERS AND LINE DRIVERS WITH 3-STATE OUTPUTS - TOP VIEW -



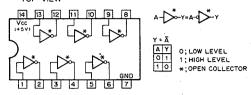
SN74HC74ANS (TI) FLAT PACKAGE C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET - TOP VIEW -



+4.5 to +5.5V

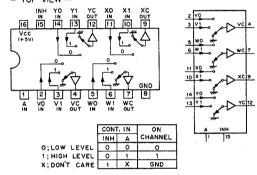
SN74LS06NS (TI) FLAT PACKAGE

TTL INVERTER BUFFER/DRIVER WITH OPEN-COLLECTOR - TOP VIEW -



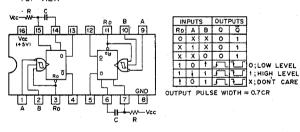
SN74LS157NS (TI) FLAT PACKAGE

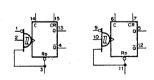
TTL 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER - TOP VIEW -



SN74LS221NS (TI) FLAT PACKAGE

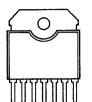
TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT - TOP VIEW -





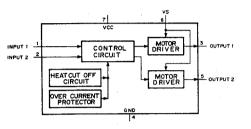
#### TA7267P (TOSHIBA)

DC MOTOR DRIVER - PRINTED SIDE VIEW -



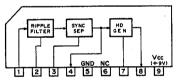
INPUTS OUTPUTS			PUTS	MODE ·	
1	2	1	2	11002	
1	1	0	0	BRAKE	
0	1	0	1	ROTATION/ REV. ROTATION	
1	0	1	0	REV. ROTATION / ROTATION	
0	0	HI-Z		STOP	

O LOW LEVEL
1 HIGH LEVEL
HI-Z; HIGH IMPEDANCE



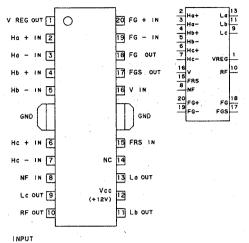
#### TA7357AP (TOSHIBA)

SYNC SEPARATOR/HD PULSE GENERATOR - SIDE VIEW -



#### TA8424F (TOSHIBA)

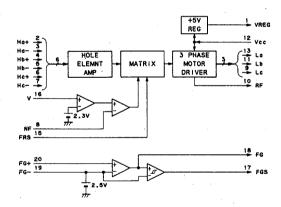
MOTOR DRIVER FOR DIRECT CURRENT COMPACT MOTOR — TOP VIEW —



INPUT
FG +/- IFG INPUT AMP
FRS :MOTOR ROTATIONAL DIRECTION CONTROL
Hd.Hb.Hc +/-HOLE ELEMENT AMP
NF IFEEDBACK OUTPUT CURRENT
V ;CONTROL VOLTAGE

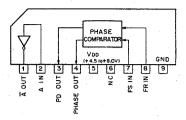
OUTPUT FG FGS La.Lb.Lc RF V REG

:FG GAIN AMP
:FG HYSTERESIS AMP
:3 PHASE MOTOR DRIVE
:OUTPUT CURRENT DETECTOR
:VOLTAGE REGULATOR

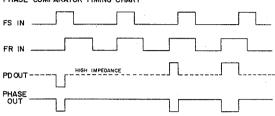


TC5081AP (TOSHIBA)

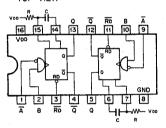
C-MOS PHASE COMPARATOR - SIDE VIEW -



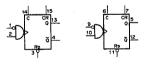
PHASE COMPARATOR TIMING CHART



TC74HC123F (TOSHIBA) FLAT PACKAGE
C-MOS DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATORS
- TOP VIEW -

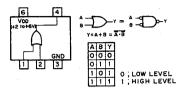


_					1			
11	NPU	T	OUT	PUT				
RD	Α	8	Q	Q				
	Х	х	0	1				
T	1	х	0	_				
T	X	0	0	1				
1	0	5	3	Ţ	O ; LOW LEVEL			
$\Box$	7_	1	<i>_</i>	Łſ	1; HIGH LEVEL			
5	0	4	<b>5</b>	۲	X; DON'T CARE			
out	OUTPUT PULSE WIDTH = 0.46CR							



OTE:	
TYPE	Voo
TC74HCT123AF	+5V
OTHER TYPES	+2 to +6V

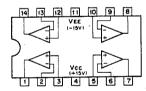
TC7S32F (TOSHIBA) FLAT PACKAGE C-MOS 2-INPUT OR GATE



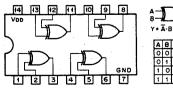
TL082CPS (TI) FLAT PACKAGE OPERATIONAL AMPLIFIER (J FET-INPUT) - TOP VIEW -



TLO84CNS (TI) FLAT PACKAGE
OPERATIONAL AMPLIFIER
(J FET-INPUT)
- TOP VIEW -



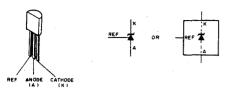
TC74HC86AF (TOSHIBA) FLAT PACKAGE C-MOS QUAD EXCLUSIVE OR GATES - TOP VIEW -



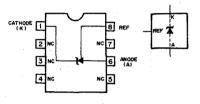
8	, 	Ā·E	)  +	<b>≻</b> -Υ Α-Β	
	A	8	Y		
	0	0	0		
	0	1	+		
	1	0	<b>~</b>	O;LOW 1;HIGH	LEVEL
	1	1	Ó	1;HIGH	LEVEL

NOTE:		
. Voo		
+2 to +5.5V		
+2 to +6V		

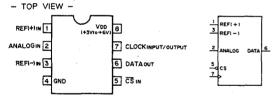
TL431CLP (TI)
ADJUSTABLE PRECISION SHUNT REGULATOR

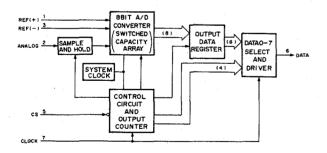


TL431CPS (TI) FLAT PACKAGE
ADJUSTABLE PRECISION SHUNT REGULATOR
- TOP VIEW -



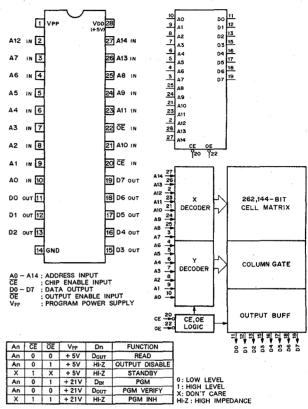
TLC549IPS (TI) FLAT PACKAGE C-MOS 8 BIT A/D CONVERTER



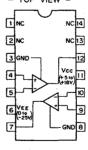


#### TMS27C256-20JL (TI)

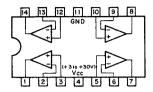
C-MOS 256K (32Kx8)-BIT ERASABLE PROM WITH 3-STATE OUTPUTS - TOP VIEW -



UPC319G2 (NEC) FLAT PACKAGE DUAL VOLTAGE COMPARATOR - TOP VIEW -



UPC324G2 (NEC) FLAT PACKAGE QUAD. OP AMPLIFIER - TOP VIEW -



UPC358G2 (NEC) FLAT PACKAGE DUAL OPERATIONAL AMPLIFIERS - TOP VIEW -



UPC4557C (NEC) UPC4572C (NEC)

OPERATIONAL AMPLIFIER (WIDE BAND, LOW NOISE) - TOP VIEW -



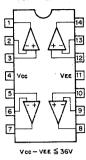
UPC4570G2 (NEC) FLAT PACKAGE OPERATIONAL AMPLIFIER - TOP VIEW -

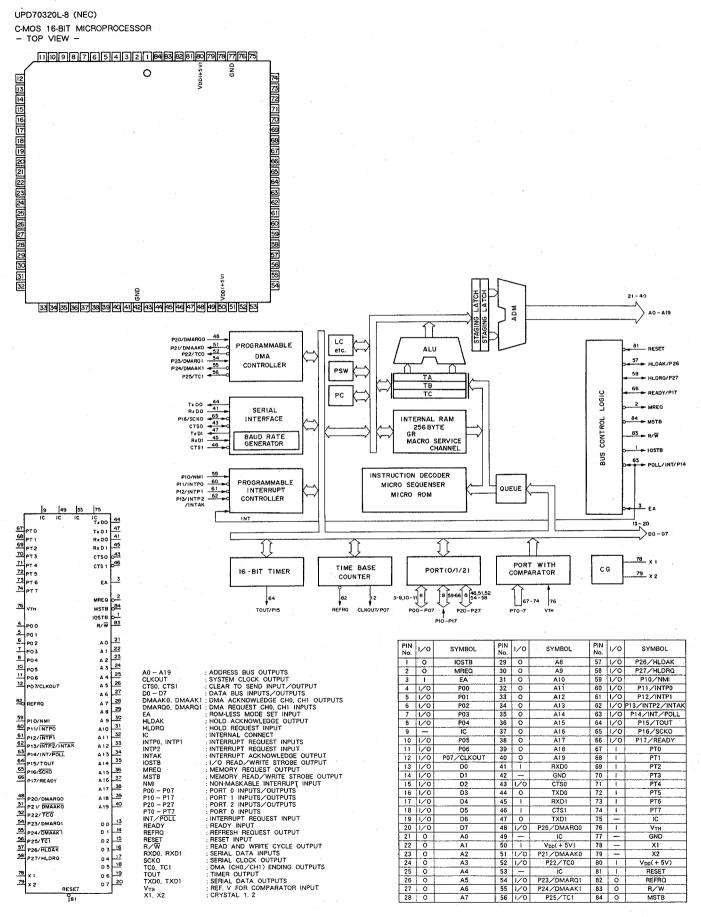


UPC4574G2 (NEC)

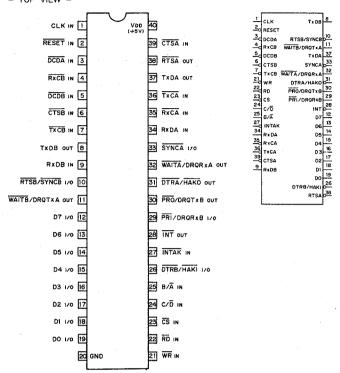
QUAD OPERATIONAL AMPLIFIER

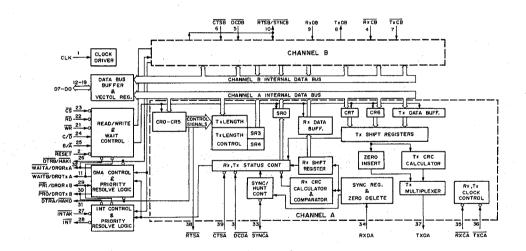
- TOP VIEW -





UPD7201AC (NEC) N-MOS MULTI-PROTOCOL SERIAL CONTROLLER - TOP VIEW -





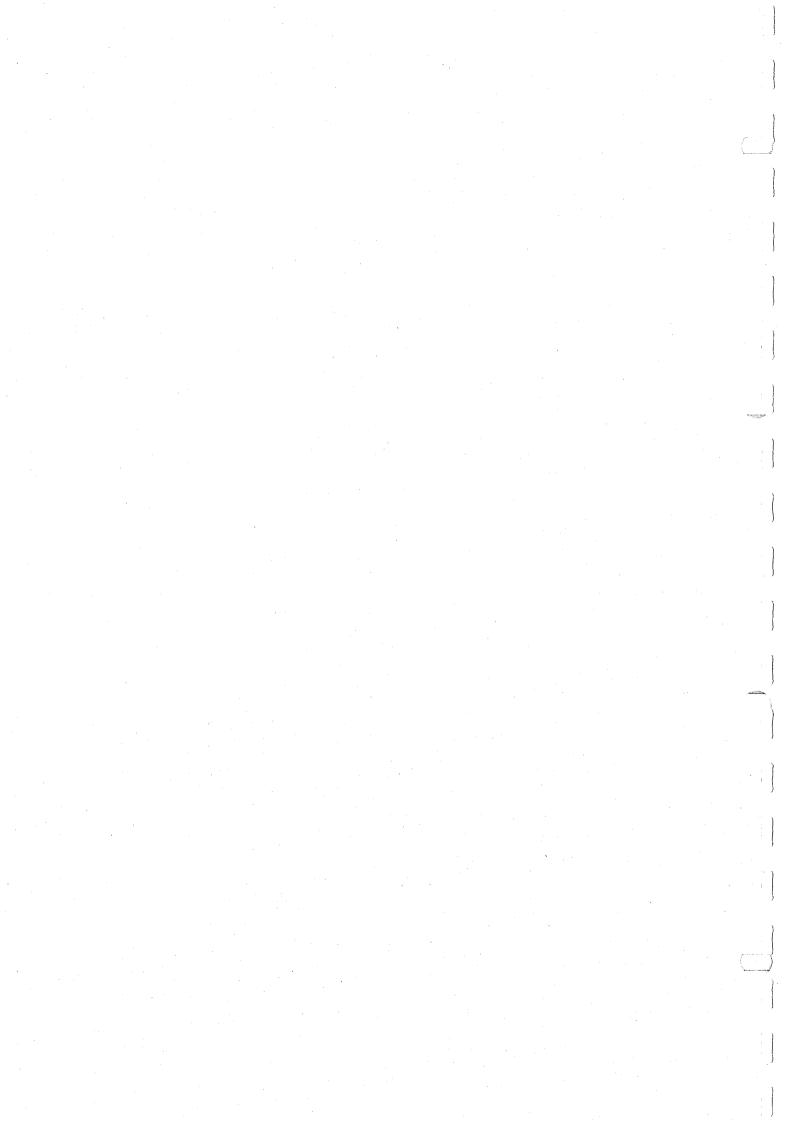
CLK; SYSTEM CLOCK D7-D0; DATA BUS CS; CHIP SELECT WR; WRITE RD; READ C/D: CONTROL/DATA B/A; CHANNEL B/CHANNEL A INT; INTERRUPT REQUEST INTAK; INTERRUPT ACKNOWLEDGE

B/A	C/D	WR	RD	cs	FANCTION
0	0	.0	1	0	CHANNEL A CHANNEL B WRITE (TXD)
0	0	1	0	0	CHANNEL A CHANNEL B READ(RXD)
0	1	0	1	0	CHANNEL A WRITE(COMMAND/PARAMETER-REGISTER)
0	1	1	0	0	CHANNEL A READ(STATUS/VECTER REGISTER)

INTAK; INTERRUPT ACKNOWLEDGE
PRI/DRORXB; PRIORITY INPUT/DMA REQUEST RXB
PRO/DRQTXB; PRIORITY OUTPUT/DMA REQUEST RXB
WAITA/ORGRXA; WAIT A/OMA REQUEST RXA
WAITB/DROTXA; WAIT B/OMA REQUEST TXA
DTRB/HAKI; DATA TERMINAL READY/HOLD ACKNOWLEDGE INPUT
DTRA/HAKO; DATA TERMINAL READY/HOLD ACKNOWLEDGE OUTPUT
RXDA, RXDB; RECEIVE DATA A/B
TXDA, TXDB; TRANSMIT DATA A/B
BYCA BYCE; WEED; CLOCK A/B RXCA.RXCB: RECEIVE CLOCK A/B

TXCA, TXCB; TRANSMIT CLOCK A/B
SYNCA; SYNCHRONIZATION A
RTSB/SYNCB; REQUEST TO SEND B/SYNCHRONIZATION B

CTSA,CTSB; CLEAR TO SEND A/B DCDA,DCDB; DATA CARRIER DETECT A/B RTSA; REQUEST TO SEND A



# SECTION 18 REPLACEABLE PARTS AND OPTIONAL FIXTURE

## 18-1. NOTES ON REPAIR PARTS

## (1) Safety Related Components Warning

Components marked with  $\triangle$  on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose part numbers appear in this manual or in service bulletin and service manual supplements published by Sony.

## (2) Standardization of Parts

Repair parts supplied from Sony Parts Center may not be always identical with the parts which actually in use due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts".

This manual's exploded views and electrical spare parts list are indicating the part numbers of "the standardized genuine parts at present"

## (3) Changes of Parts

Regarding engineering parts changes, refer to "Section 19. CHANGED PARTS".

#### (4) Stock of Parts

Parts marked with "o" SP(Supply Code) column of the spare parts list are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

## (5) Units for Capacitors, Inductors and Resistors

The following units are assumed in schematic diagrams, electrical parts list and exploded views unless otherwise specified.

Capacitors :  $\mu$ F Inductors :  $\mu$ H Resistors :  $\Omega$ 

## (6) Tension Spring

 $(\times \times T)$ after a tension spring is shown on the parts list in order to indicate the number of spring turns required for the use.

(Example) TENSION, SPRING(20 T):

This spring must be cut at its 20 th turn for actual use.

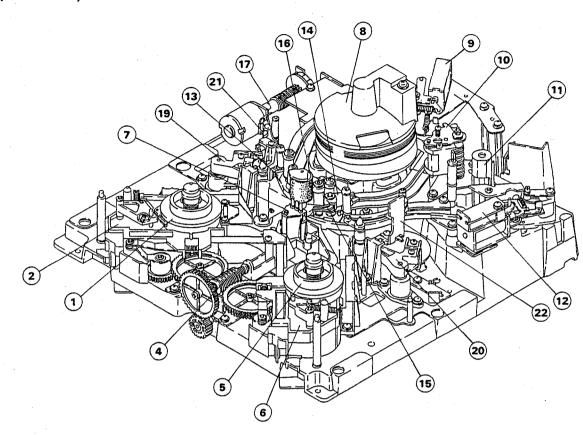
# 18-2. EXPLODED VIEW

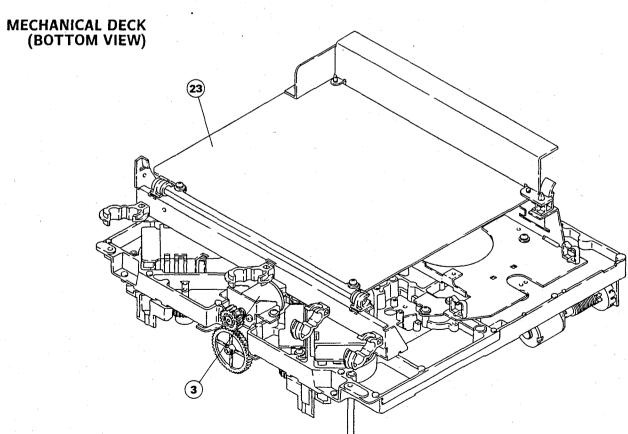
# Index of Main Mechanical Parts / Components

Mark	ltem	Title	Page
① ② ③ ④	S Reel Table RS Table (S) Block LS Motor Block LS Gear Block	REEL CHASSIS (1)	18-4
\$ <b>6</b>	T Reel Table RS Table (T) Block Cassette Sensor	REEL CHASSIS (2)	18-7
8	Head Drum Cleaning Roller Block	DRUM & CLEANING ROLLER ASSEMBLY	18-8
(1) (1) (2)	Audio/TC Head Capstan Motor Pinch Solenoid Block	HEAD & PINCH PRESS ASSEMBLY	18-11
13 (4) (b)	S Slider T Slider P Slider	RAIL & SLIDER ASSEMBLY	18-12
16	Threading Ring	THREADING RING	18-15
17)	Threading Gear Box	THREADING GEAR BOX ASSEMBLY	18-17
988	S Tension Regulator T Tension Regulator Tape End Sensor Tape Beginning Sensor	TENSION REGULATOR ASSEMBLY	18-19
23	Printed Circuit Board	REEL CHASSIS (3)	18-21
24	Cassette Compartment	CASSETTE COMPARTMENT ASSEMBLY	18-23
<b>3</b>	Upper Lid Bottom Panel Cabinet (right) Cabinet (left)	CHASSIS & ORNAMENTAL PANEL BLOCK	18-24
26	Printed Circuit Boards	CARD RACK BLOCK	18-27
<b>Ø</b>	Front Panel Front Chassis Cassette Guide	FRONT PANEL BLOCK	18-29
<b>28</b>	Key Panel Search Dial	FUNCTION CONTROL PANEL BLOCK	18-31
29	Connector Panel	REAR PANEL BLOCK	18-32

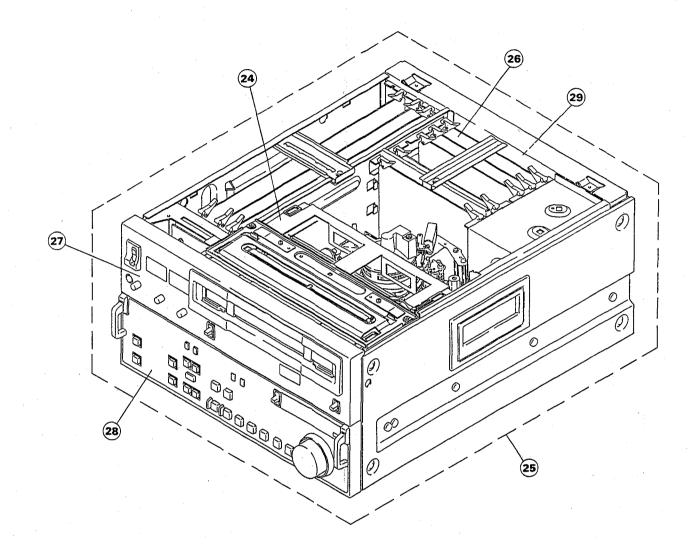
18 - 2

# MECHANICAL DECK (TOP VIEW)

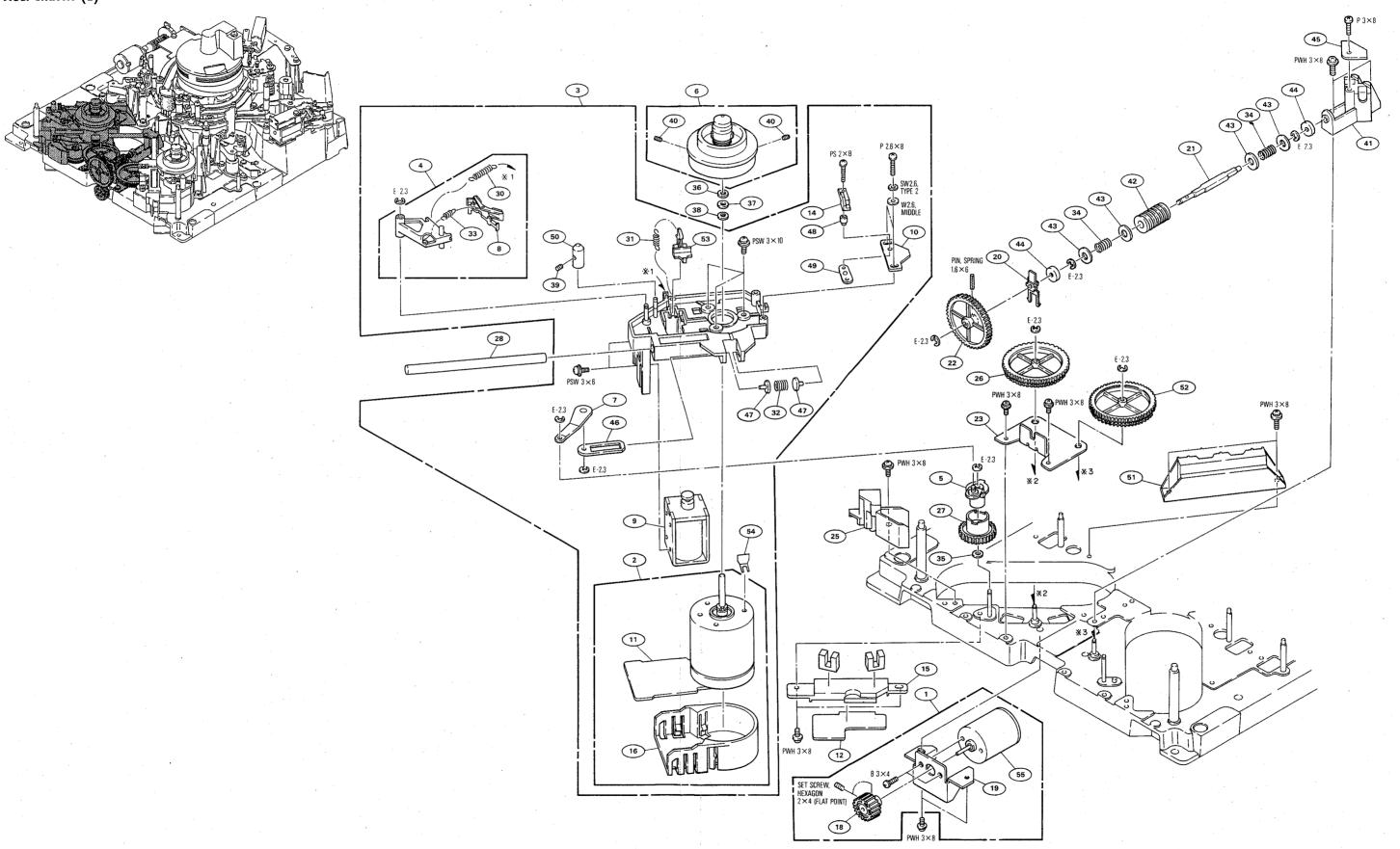




# **OVERALL BLOCK**





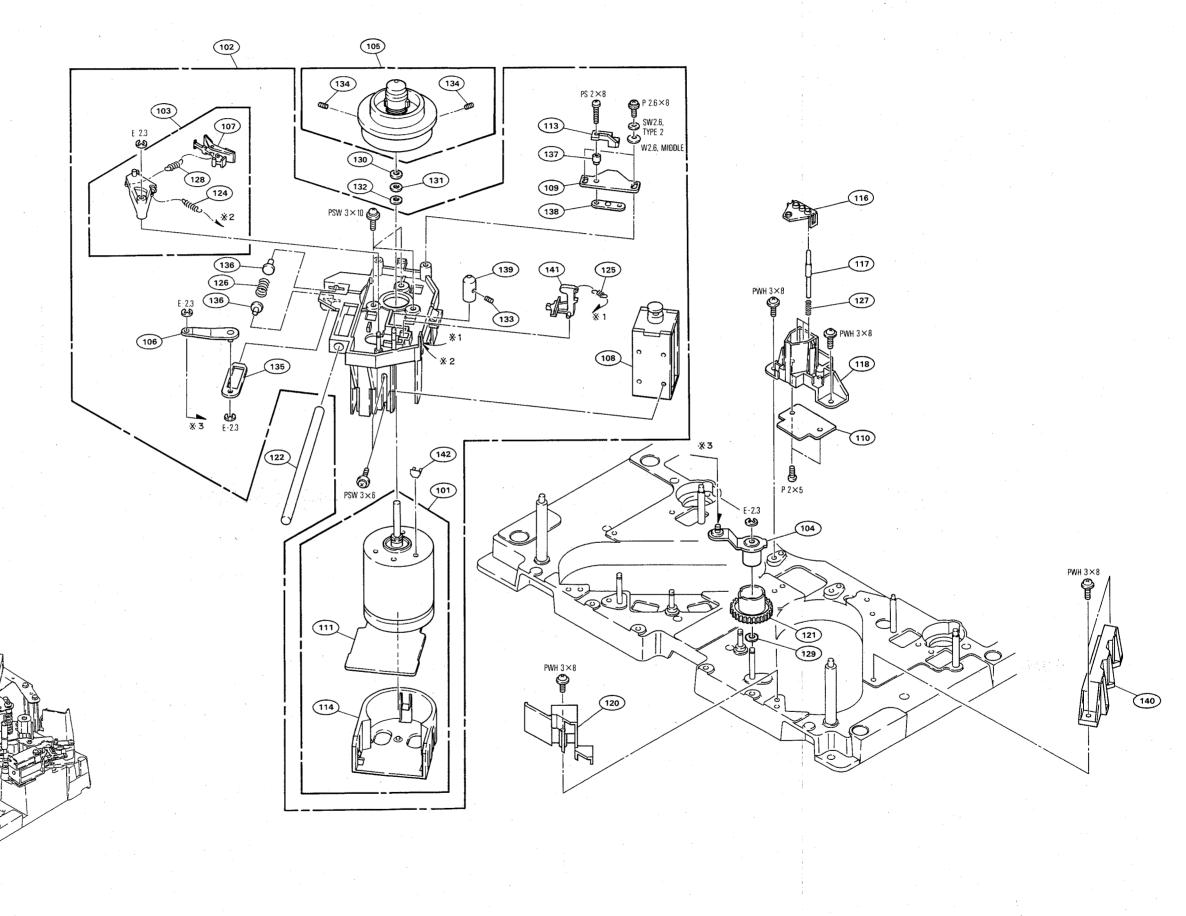


```
SP Description
         Part No.
No
         A-6737-206-B o MOTOR ASSY, LS
         A-6737-207-A s RM ASSY
         A-6739-097-A s TABLE (S) BLOCK ASSY, RS
 3
         A-6741-066-A O BRAKE ASSY
         X-3166-024-1 o ARM (A) ASSY, CRANK
        X-3166-025-2 s TABLE ASSY, REEL
         X-3166-060-1 o ARM (B) ASSY, CRANK
        X-3717-205-1 s LINING ASSY
1-454-417-41 s SOLENOID "S-BRAKE"
 8
 g
         1-622-606-11 o PRINTED CIRCUIT BOARD, DE-15
         1-640-166-12 o PRINTED CIRCUIT BUARD, RM-82
11
         1-640-168-12 o PRINTED CIRCUIT BOARD, PTC-42
12
         1-807-683-11 s DME
14
         3-171-308-01 o BRACKET, LS SENSOR
15
         3-171-309-01 o COVER, RM
16
         3-171-316-01 s GEAR, M
18
         3-171-317-01 o BRACKET, M
19
         3-171-318-01 o BEARING, WORM
20
21
22
         3-171-319-01 o SHAFT, WORM
3-171-320-01 o GEAR, DRIVE
         3-171-321-01 o BRACKET, GEAR
         3-171-397-01 o HOLDER (S), SHAFT
25
         3-171-429-01 o GEAR, LS
3-171-430-01 o GEAR, CRANK
26
27
         3-171-431-01 s SHAFT, SLIDE
28
         3-307-381-00 s SPRING, TENSION 3-535-532-01 s SPRING, TENSION
30
31
         3-491-247-00 s SPRING, COMPRESSION 3-648-217-00 o SPRING, TENSION
33
         3-659-324-00 s SPRING, COMPRESSION
34
         3-701-439-21 s WASHER, POLY 3MM DIA., 0.5T
         3-701-441-01 s WASHER, POLY 4MM DIA., 0.13T
3-701-441-11 s WASHER, POLY 4MM DIA., 0.25T
3-701-441-21 s WASHER, POLY 4MM DIA., 0.50T
3-701-506-01 s SET SCREW, DOUBLE POINT 3X4
36
37
38
         3-701-507-00 s SET SCREW, DOUBLE POINT, (M3X5)
40
         3-717-208-01 o HOLDER (A), SHAFT
         3-717-210-01 s WORM
         3-717-212-01 o WASHER (B), WORM
43
         3-717-213-01 o WASHER (A). WORM
         3-717-224-01 s RETAINER, SHAFT, SLIDE
45
         3-717-230-01 o BRACKET, LIMITER
3-717-231-01 o HOLDER, LIMITER
3-717-232-01 o SHAFT, FITTING, MR SENSOR
3-717-233-01 o BRACKET, DE-15
46
47
48
49
50
         3-717-266-01 o CAP (S), CG SHAFT
         3-717-398-01 o TABLE, SLIDE
52
         3-717-399-01 s WHEEL, W
         3-717-450-01 o ARM, BRAKE RELEASE
53
         3-717-625-01 s SPACER
54
```

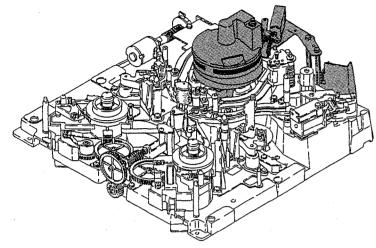
8-835-179-01 s MOTOR, DC MCB2B15

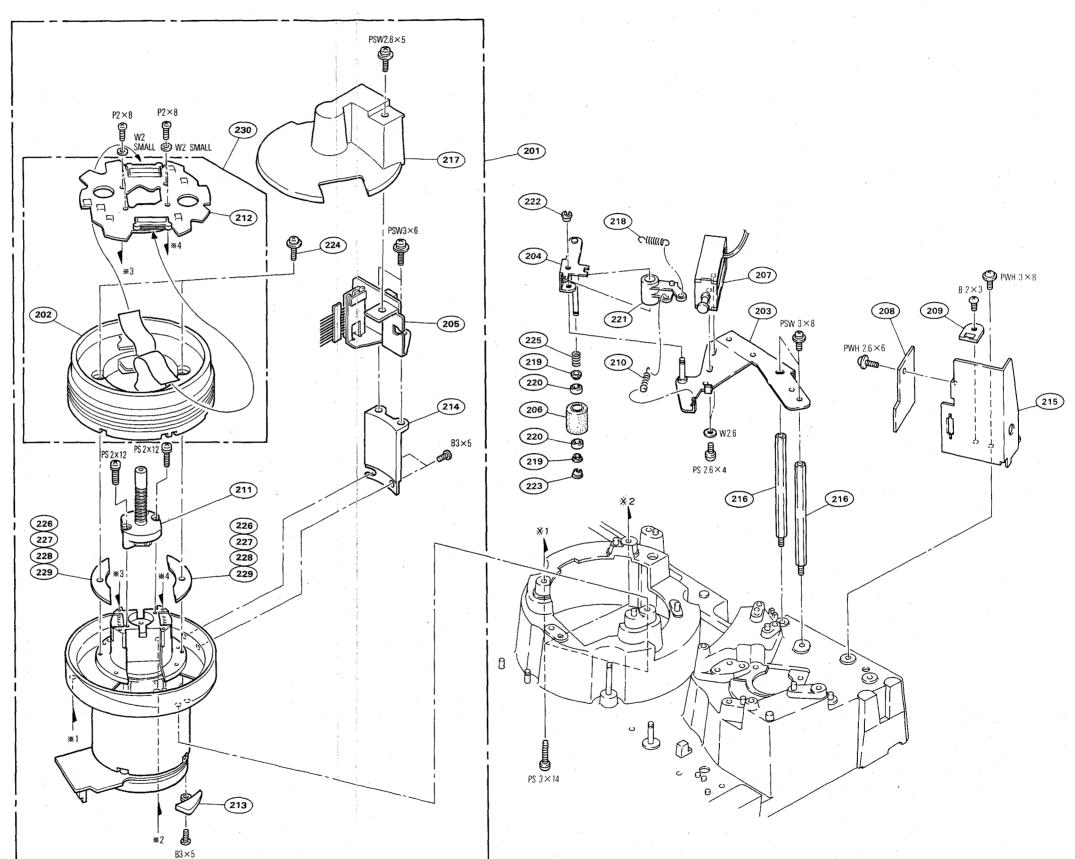
55

```
Part No.
                           SP Description
No.
          A-6737-207-A s RM ASSY
          A-6739-098-A s TABLE (T) BLOCK ASSY, RS
102
          A-6741-066-A o BRAKE ASSY
103
          X-3166-024-1 o ARM (A) ASSY, CRANK
X-3166-025-2 s TABLE ASSY, REEL
104
105
         X-3166-060-1 o ARM (B) ASSY, CRANK
X-3717-205-1 s LINING ASSY
1-454-417-41 s SOLENOID "T-BRAKE"
1-622-606-11 o PRINTED CIRCUIT BOARD, DE-15
106
107
108
109
          1-640-165-11 o PRINTED CIRUCIT BOARD, PTC-55
110
          1-640-166-12 o PRINTED CIRCUIT BOARD, RM-82
111
          1-807-683-11 s DME
113
          3-171-309-01 o COVER, RM
114
116
          3-171-313-01 o COVER, MC
          3-171-314-01 s LEVER (B), SENSOR
117
          3-171-328-02 o HOLDER, MC DETECTION
118
120
          3-171-428-01 o HOLDER (T), SHAFT
          3-171-430-01 o GEAR, CRANK
3-171-431-01 s SHAFT. SLIDE
121
122
          3-307-381-00 s SPRING, TENSION
125
          3-535-532-01 s SPRING, TENSION
          3-491-247-00 s SPRING, COMPRESSION
126
         3-554-202-00 o SPRING, COMPRESSION
3-648-217-00 o SPRING, TENSION
3-701-439-21 s WASHER, POLY 3MM DIA, 0.5T
127
128
129
         3-701-441-01 s WASHER, POLY 4MM DIA, 0.13T 3-701-441-11 s WASHER, POLY 4MM DIA, 0.25T 3-701-441-21 s WASHER, POLY 4MM DIA, 0.50T 3-701-506-01 s SET SCREW, DDUBLE POINT 3X4 3-701-507-00 s SET SCREW, DOUBLE POINT, (M3X5)
130
131
132
133
134
         3-717-230-01 o BRACKET, LIMITER
3-717-231-01 o HOLDER, LIMITER
3-717-232-01 o SHAFT, FITTING, MR SENSOR
136
137
138
          3-717-233-01 o BRACKET, DE-15
139
          3-717-266-01 o CAP (S), CG SHAFT
          3-717-398-01 o TABLE SLIDE
141
          3-717-450-01 o ARM, BRAKE RELEASE
          3-717-625-01 s SPACER
```



Drum and cleaning roller assembly





```
Part No.
                            SP Description
No.
          A-8260-249-A s HEAD DRUM ASSY, DBH-34A-R
201
          A-8260-250-A s DRUM ASSY (DBR-34-R), UPPER ROTARY X-3166-324-1 o C (BASE) ASSY
202
203
          X-3166-325-1 o ARM ASSY, C MAIN
A-8262-727-A s BRUSH ASSY (RP)
204
205
          X-3675-858-1 s ROLLER SUB ASSY, C
1-454-372-11 s SOLENOID "CLEANING ROLLER"
206
207
          1-640-167-11 o PRINTED CIRCUIT BOARD, DS-31
208
           1-806-682-71 s SENSOR, DEW CONDENSATION
209
           3-140-263-XX s SPRING, TENSION (23T)
210
          A-8262-728-A s RING (8) ASSY (RP), SLIP
A-8262-729-A o MOUNTED CIRCUIT BOARD, PA-108
211
212
          A-8202-129-A O MODRIED CIRCUIT BORI
3-171-326-01 O BRACKET (B) TAPE
3-172-347-02 O SUPPORT, BRUSH
3-172-933-01 O BRACKET, DEW SENSOR
213
214
215
           3-173-187-02 o SUPPORT
3-172-348-01 o COVER, BRUSH
216
217
           3-542-475-00 s SPRING, TENSION 3-655-966-00 s SPACER, STEP
218
219
           3-669-443-01 s BEARING, BALL (NO FLANGE)
 220
           3-680-839-01 o LEVER (2), C
3-703-074-00 s CAP 3, SHAFT
3-703-075-00 s CAP 2, SHAFT
3-729-126-01 s SCREW (M3×10)
 221
 222
223
 225
           4-879-762-00 s SPRING, COMPRESSION
           3-683-828-01 s SPACER, FLANGE
           3-683-828-11 s SPACER, FLANGE
3-683-828-21 s SPACER, FLANGE
 227
 228
 229
           3-683-828-31 s SPACER, FLANGE
           A-8260-251-A s DRUM ASSY (DBR-34A-R), UPPER ROTARY
 230
```

18 - 9

# **AD & PINCH PRESS ASSEMBLY**

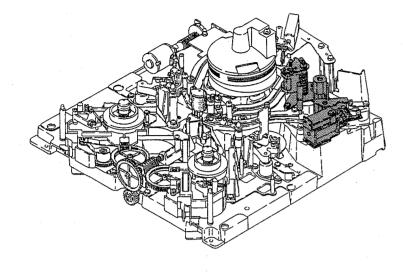
Part No.

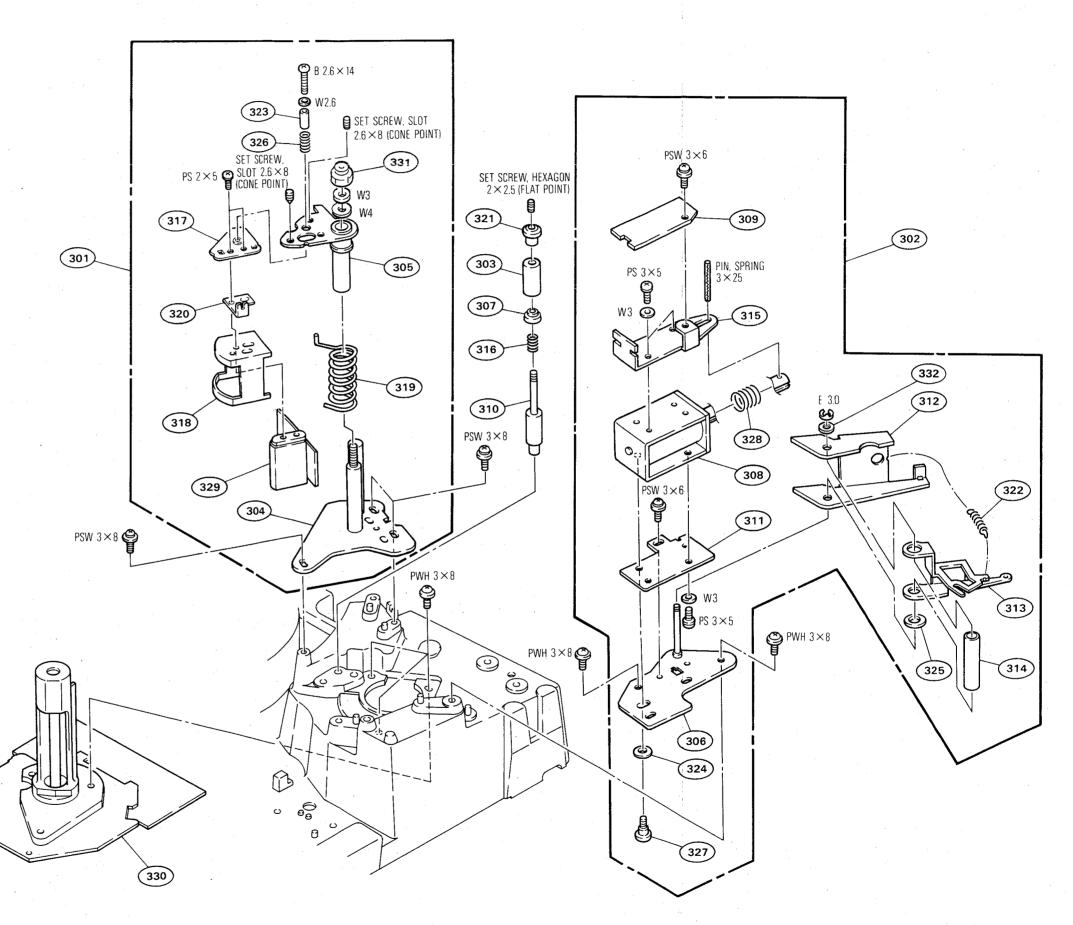
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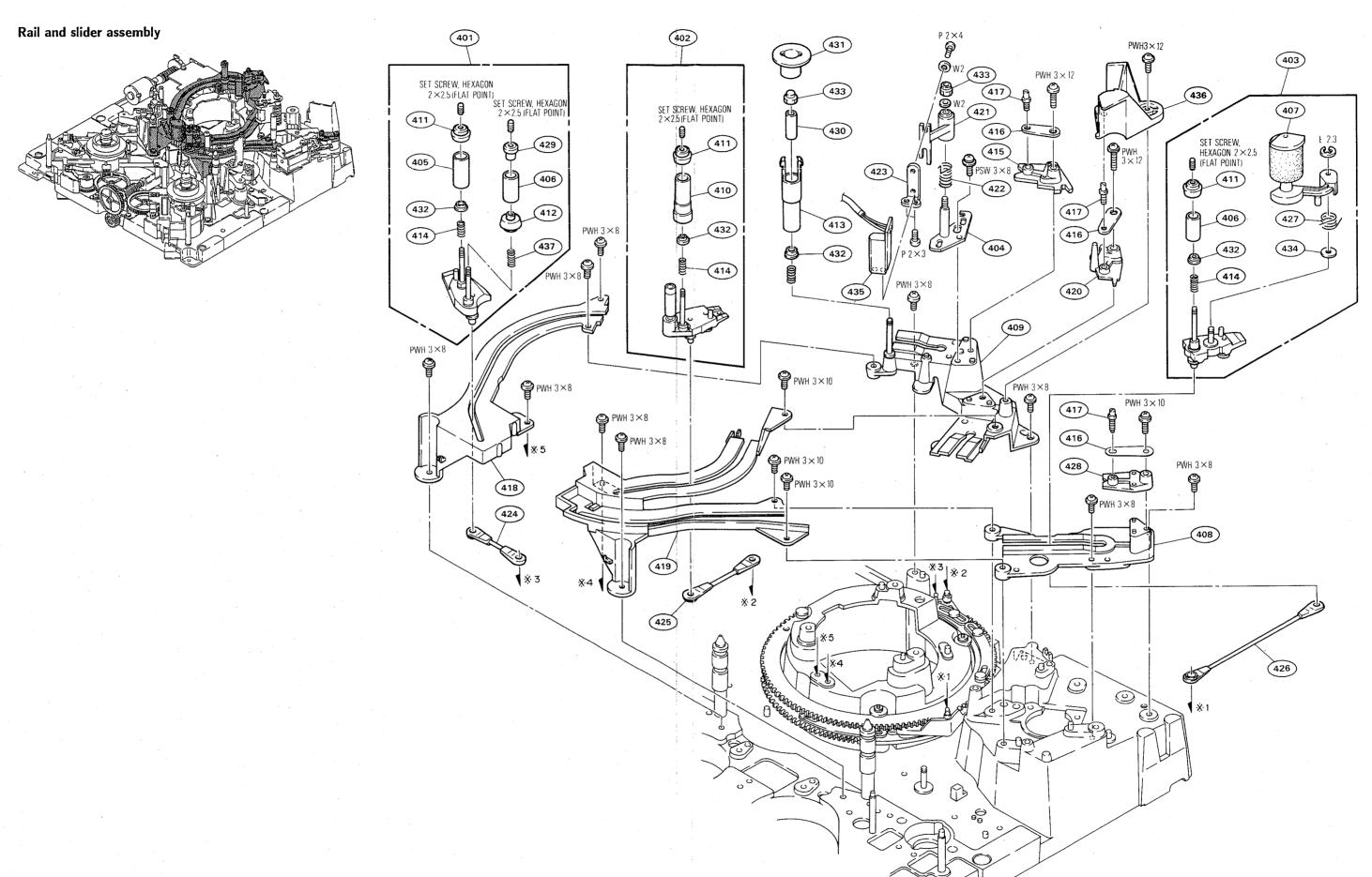
.,	tare no.
301	A-6736-098-C o HEAD (P) ASSY, AT
302	A-6749-125-A o PRESS ASSY, PINCH
303	X-3166-431-1 s ROLLER (TG-6) ASSY, TAPE
304	X-3166-044-2 s DECK (P) ASSY, AT
305	X-3166-050-1 o PLATE ASSY, ADJUSTMENT, RP
306	X-3166-061-2 o BASE ASSY, PINCH PRESS
307	3-174-316-02 s FLANGE (LOWER)
308	1-454-338-00 s SOLENDID "PINCH"
309	1-640-162-12 o PRINTED CIRCUIT BOARD, PD-56
310	3-171-307-01 o SHAFT, TG-6
311	3-171-331-01 o BASE, SOLENOID
312	3-171-332-01 o ARM, PINCH PRESS
313	3-171-333-01 o ARM, SUB PRESS
314	3-171-334-02 o COLLAR, PINCH SHAFT
315	3-171-335-01 o HOLDER, PC BOARD
316	2-242-703-00 s SPLING, COMPLESSION
317	3-171-567-02 o BRACKET, RP
318	3-171-568-01 o CASE, SHIELD, AT
319	3-171-569-01 s SPRING (A)
320	3-171-570-01 o PLATE (R), ADJUSTMENT
321	3-173-176-01 s NUT, ADJUSTMENT
322	3-578-532-00 s SPRING, TENSION
323	3-642-719-00 o SPACER (2.6X11)
324	3-701-441-21 s WASHER, POLY 4MM DIA., 0.50T
325	3-701-444-21 s WASHER, POLY 6MM DIA., 0.50T
326	3-738-730-01 s SPRING, COMPRESSION
327	4-835-134-00 s SCREW, TD 3.8X2.5
328	4-860-709-02 s SPRING, COMPRESSION
329	8-825-776-22 s HEAD PSZ44-2103E "AUDIO/TC"
330	8-835-445-01 s MOTOR, DC SCV-0301A "CAPSTAN"
331	4-334-513-00 s NUT, NYLON
332	3-701-441-11 s WASHER

SP Description

# Head and pinch press assembly







18 - 12

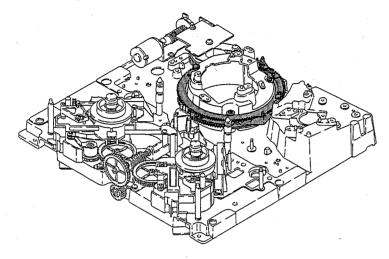
PVW-2650P

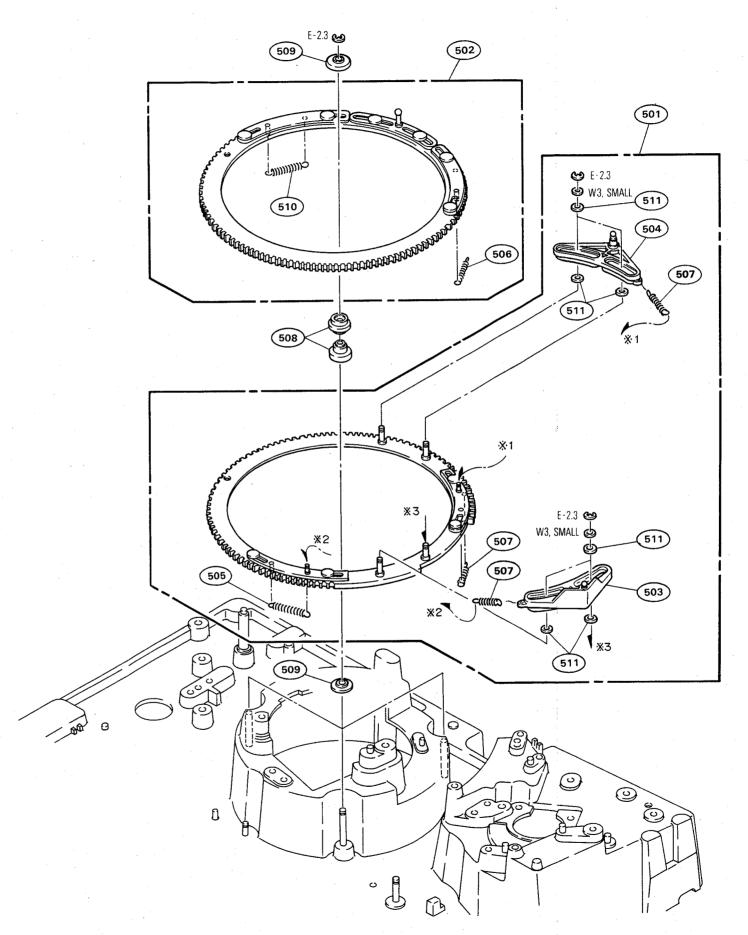
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Part No.
                                   SP Description
No.
            A-8262-601-A s SLIDER ASSY, S
A-6750-292-C s SLIDER ASSY, T
A-6750-293-D s SLIDER ASSY, P
401
402
403
            X-3166-027-1 o BASE ASSY, CTL
X-3166-573-1 s TG-3 ASSY
404
405
            3-176-903-01 s GUIDE TAPE
X-3166-040-3 s ARM ASSY, PINCH
X-3166-042-2 o BASE SUB ASSY, P
X-3166-072-5 s BASE SUB ASSY, ST
406
407
408
409
            X-3166-320-1 s TG-5 ASSY
410
            3-174-315-01 s FLANGE (UPPER)
            3-176-902-01 s FLANGE (LOWER)
X-3166-386-1 s TG-4 (IP) ASSY
3-171-344-01 s SPRING, COMPRESSION
412
413
            3-171-345-01 s PLATE, ADJUSTMENT, S
            3-171-346-01 o SPRING, ADJUSTMENT 3-171-347-02 o SCREW, ADJUSTMENT
416
417
            3-171-348-02 s RAIL, S
3-171-349-03 o RAIL, T
3-171-378-02 s PLATE, ADJUSTMENT, T
418
419
420
             3-171-381-02 o ARM, CTL
421
422
423
            3-171-382-01 s SPRING, CTL
3-171-383-02 o PLATE, SIDE, CTL
            3-171-432-02 s ROD, S
3-171-433-02 s ROD, T
424
 426
            3-171-434-02 s ROD, P
            3-171-498-01 s SPRING, PINCH ARM RETURN
3-171-515-01 s PLATE, ADJUSTMENT, P
3-173-176-01 s NUT, ADJUSTMENT
3-173-648-01 o RETAINER, BEARING
427
428
429
430
             3-176-408-01 s FLY WHEEL (D75)
            3-170-408-01 S PLT WHEEL (073)
3-655-966-00 s SPACER, STEP
3-698-829-01 s NUT (M2)
3-701-439-01 s WASHER, POLY 3MM DIA, 0.13T
8-825-776-41 s HEAD PS244-21C "CTL"
432
433
 434
435
             3-174-911-01 o COVER, AU, HEAD
 436
             3-513-234-00 s SPRING, COMPRESSION
437
```

# IREADING RING

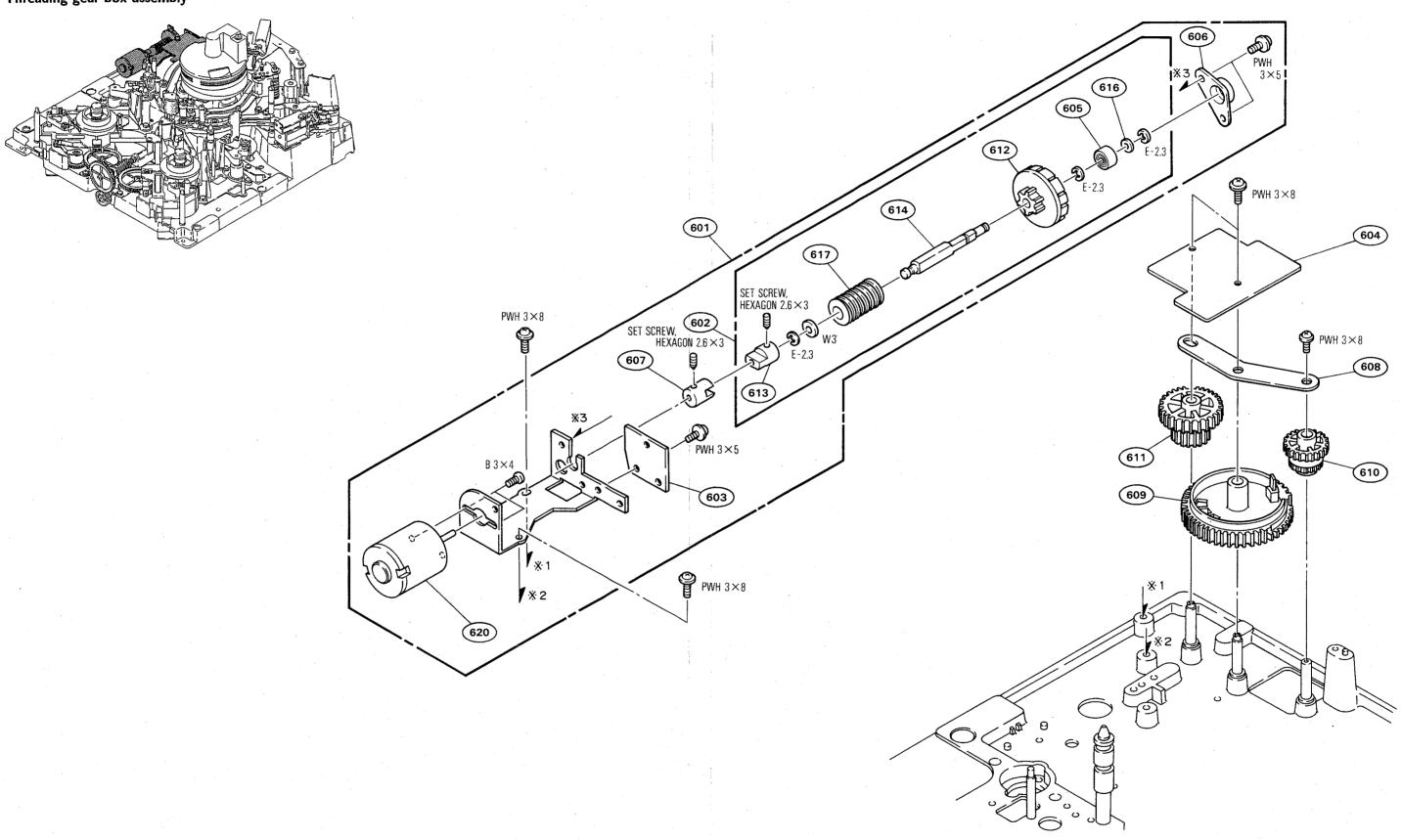
No.	Part No. SP Description
501	A-6750-289-C o RING ASSY, T
502	A-6750-290-B o RING ASSY, S
503	X-3166-028-2 o SLIDER ASSY, P
504	X-3166-029-2 o SLIDER ASSY, T
505	3-171-384-01 o SPRING, TENSION
506	3-171-385-01 o SPRING, TENSION
507	3-171-386-01 o SPRING, TENSION
508	3-171-435-02 o ROLLER (A), RING
509	3-171-436-01 o ROLLER (B), RING
510	3-171-468-01 o SPRING, TENSION
511	3-701-439-11 s WASHER, POLY 3MM DIA. 0.25T

Threading ring





Threading gear box assembly

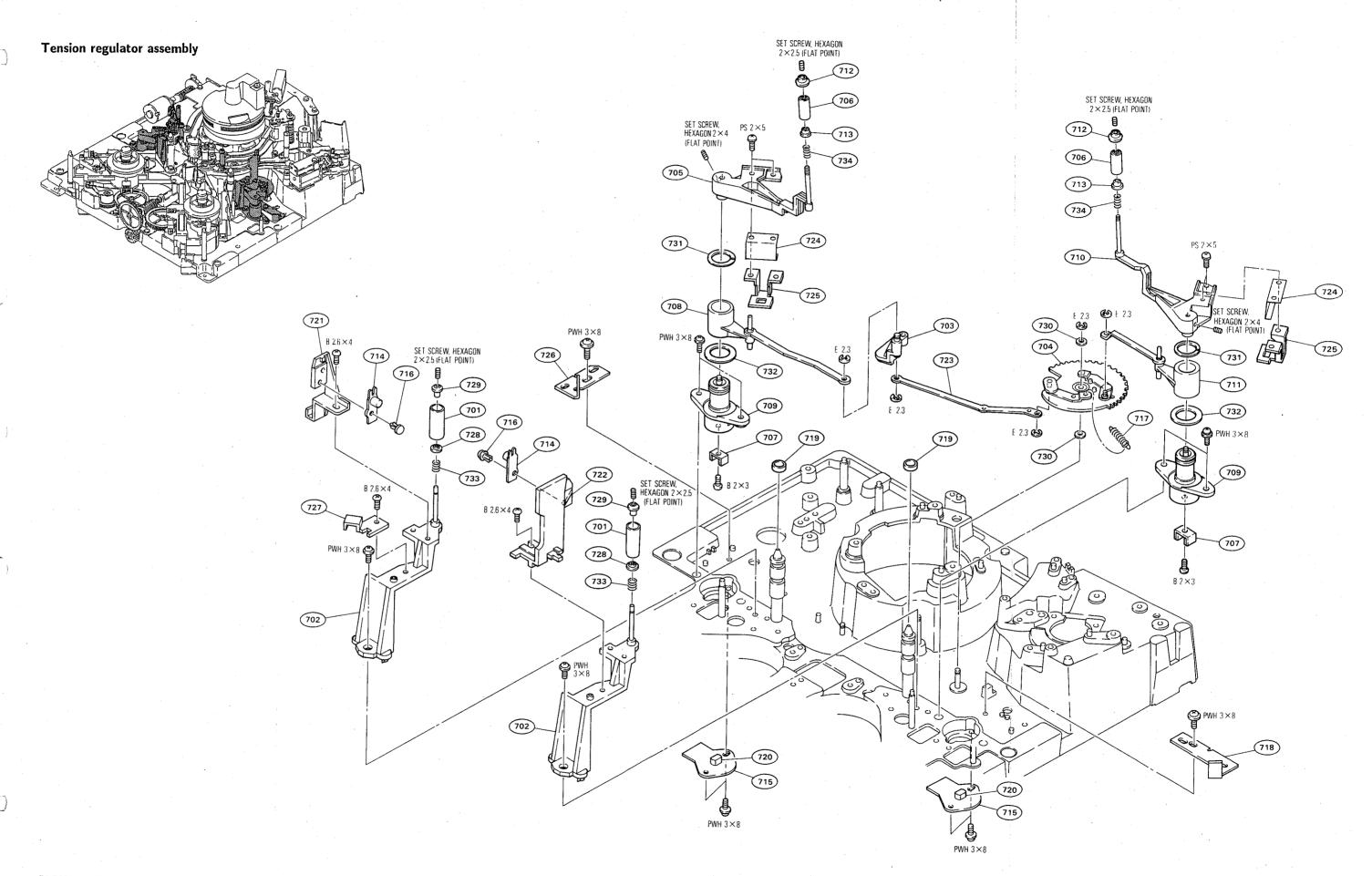


```
No.
              Part No.
                                    SP Description
             A-6750-294-C s MOTOR ASSY, LOADING A-6750-295-B o WORM ASSY
601
602
             1-640-163-11 o PRINTED CIRCUIT BOARD, PTC-54
1-640-164-11 o PRINTED CIRCUIT BOARD, PTC-49
2-621-007-01 s BEARING, BALL, (B) (NO FRANGE)
603
604
605
             3-171-336-01 o HOLDER, BEARING
3-171-337-01 o JOINT (1)
3-171-352-01 o REINFORCEMENT
3-171-353-02 o GEAR, MAIN
3-171-354-02 o GEAR, S
606
607
608
609
610
              3-171-355-01 o WHEEL, WORM
611
             3-171-389-01 o RING, FG
3-171-389-01 o JOINT (2)
3-171-391-01 o SHAFT. WORM
3-701-439-21 s WASHER, POLY 3MM DIA., 0.50T
612
613
614
616
617
              3-717-210-01 s WORM
620
              8-835-179-01 s MOTOR, DC MCB2B15
```

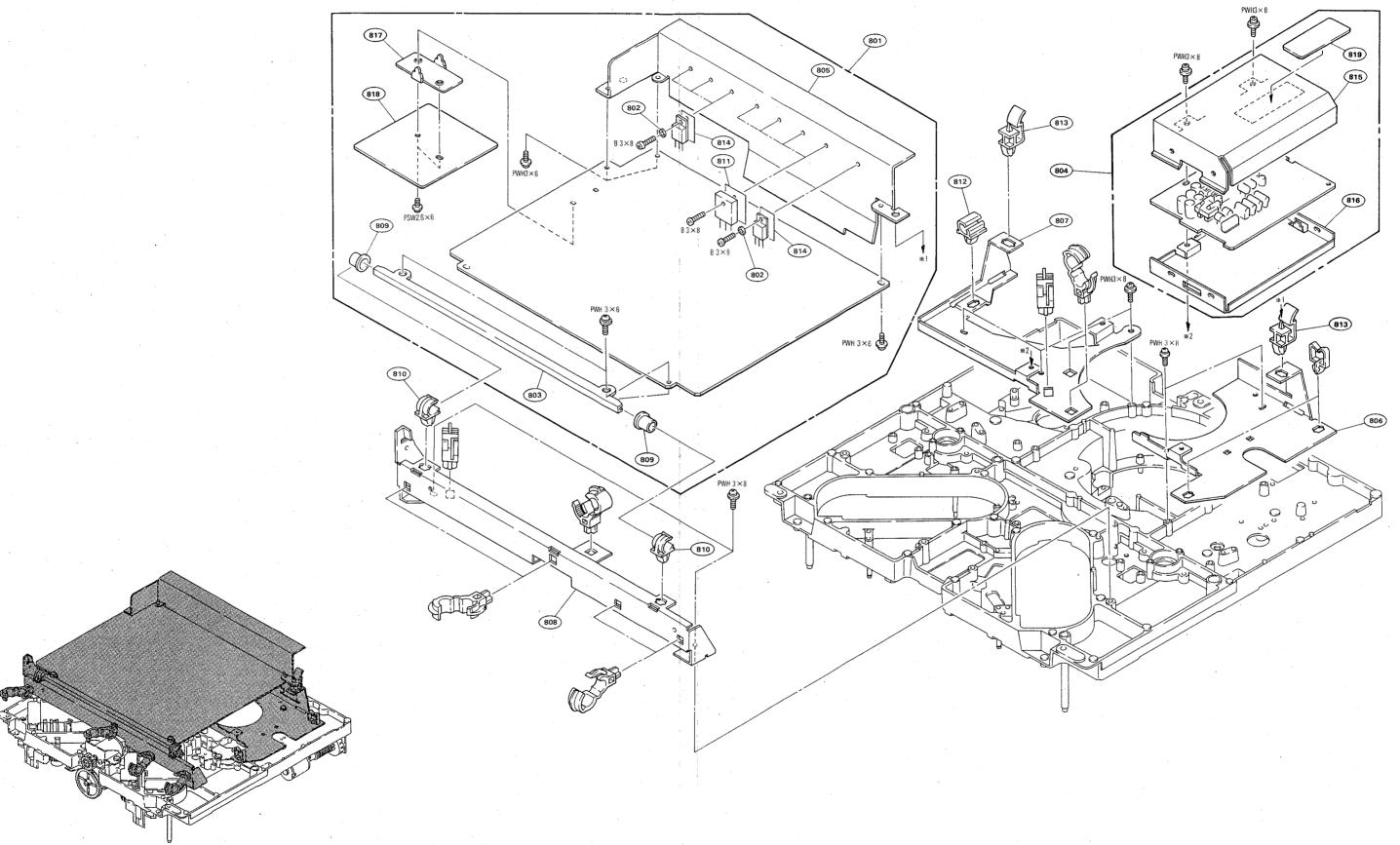
PVW-2650P

## **ENSION REGULATOR ASSEMBLY**

```
No.
          Part No. SP Description
         \text{X-}3166\text{-}037\text{-}2 s ROLLER (M) ASSY, TAPE \text{X-}3166\text{-}043\text{-}2 o ARM ASSY, CASSETTE EXIT \text{X-}3166\text{-}047\text{-}1 o ARM ASSY, SUB DRIVING
701
702
703
          X-3166-048-3 o GEAR SUB ASSY, DRIVING
704
705
         X-3166-051-2 s ARM ASSY, S TENSION REGULATOR
         \text{X-}3166\text{-}052\text{-}1 s ROLLER (S-T) ASSY, TAPE \text{X-}3166\text{-}053\text{-}2 o YOKE ASSY, MAGNET
706
707
         X-3166-054-1 o ARM ASSY, DRIVING
X-3166-055-2 s SUPPORT ASSY, TENSION REGULATOR
708
709
         X-3166-057-2 s ARM ASSY, T TENSION REGULATOR
710
         X-3166-059-1 o ARM ASSY, DRIVING
712
         3-174-315-01 s FLANGE (UPPER)
         3-174-316-02 s FLANGE (LOWER)
713
         1-543-316-31 s HEAD, SENSING
714
         1-640-161-11 o PRINTED CIRCUIT BOARD, TR-73
716
         2-279-715-01 s RIVET, NYLON
717
         3-531-860-00 s SPRING, TENSION
         3-171-350-01 o STOPPER, T
3-171-351-01 o STOPPER, TENSION REGULATOR
718
719
720
         3-171-392-01 s HOLDER, DME
         3-171-516-01 o HOLDER, S SENSOR
721
         3-171-519-02 s HOLDER, T SENSOR
3-171-520-01 o DISK (A), S TENSION REGULATOR
722
723
724
         3-171-579-02 o SPRING, LEAF, TENSION REGULATOR
725
         3-176-613-01 o PROTECTOR
         3-171-592-01 o STOPPER, S
726
         3-172-763-01 o HOLDER, SENSOR HARNESS
3-173-172-01 s FLANGE, LOWER
727
728
         3-173-176-01 s NUT, ADJUSTMENT
3-701-439-21 s WASHER, POLY, 3MM DIA., 0.5T
729
730
731
         3-701-447-21 s WASHER,
         3-701-448-21 s WASHER, POLYETHYLENE
732
         4-879-563-00 s SPRING, COMPRESSION
733
734
         2-618-901-00 s SPKING, COMPRESSION
```





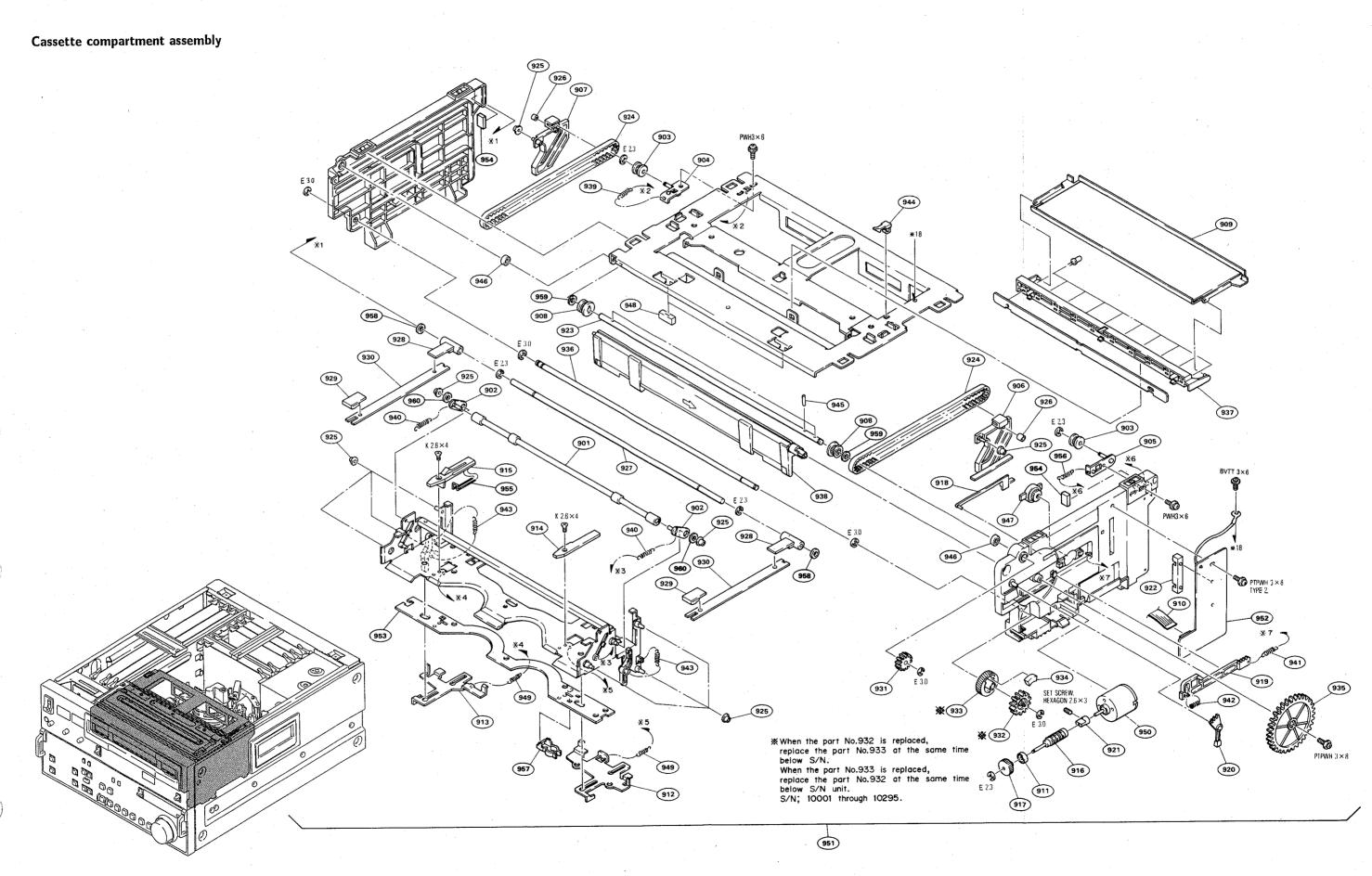


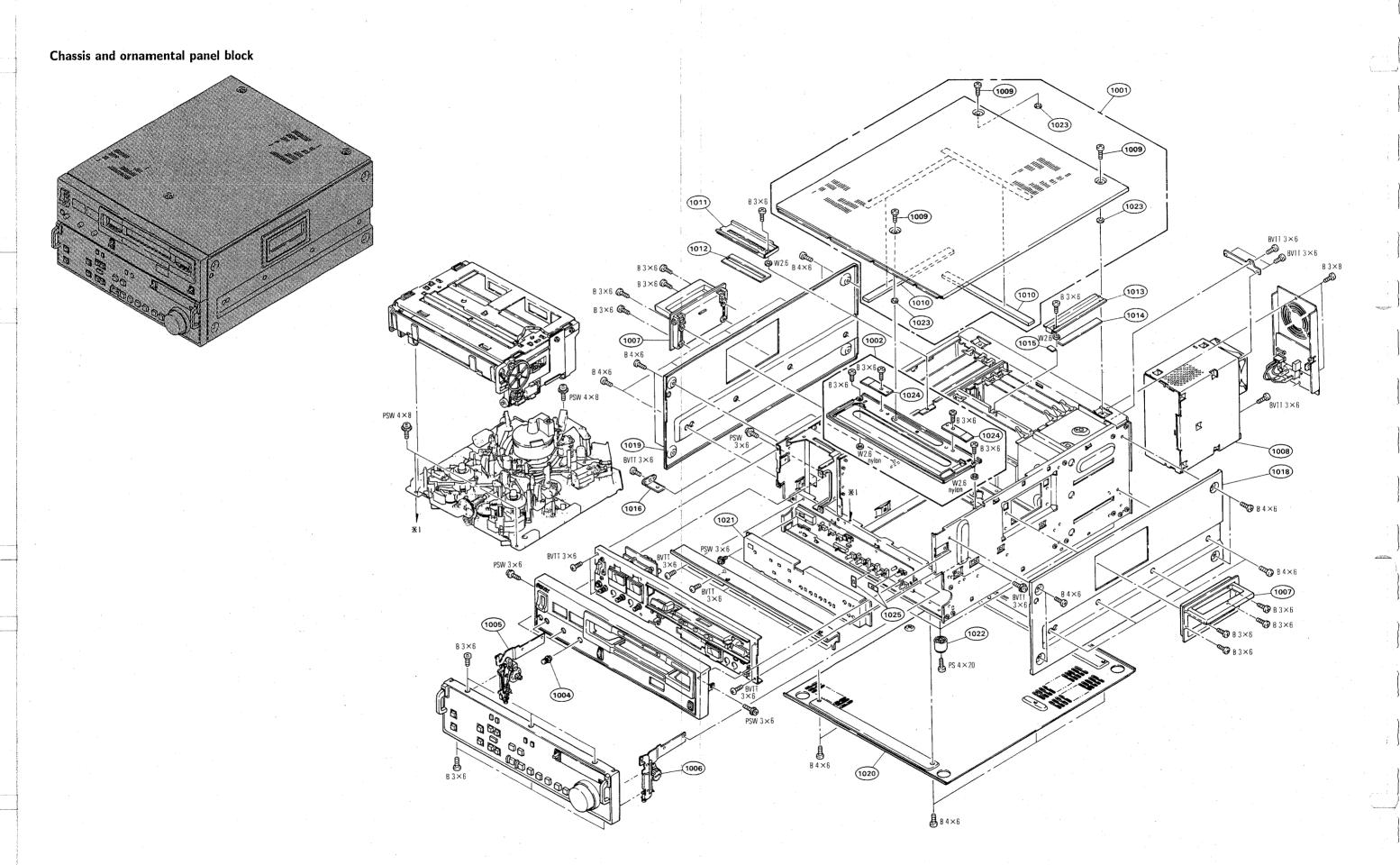
No.	Part No. SP D	Description
802 803 804	2-371-561-00 s B 3-171-393-01 o S	OUNTED CIRCUIT BOARD, DT-29AP
807 808 809	3-171-506-02 o P	PLATE, FIXED, DT PLATE, FIXED, DR CAP, REINFORCEMENT
812 813 814	3-703-072-00 o H 3-703-141-00 o H 4-911-232-01 s S	SHEET, HEAT RESISTING HOLDER, PCB HOLDER, PCB HEET, INSULATING HOLDER, DT SHIELD
817 818	3-176-490-01 o H	IEAT SINK (2).DR

### **ASSETTE COMPARTMENT ASSEMBLY**

No.	Part No. SP Description
901	X-3166-062-1 o SHAFT ASSY, PRESS ROLLER
902	X-3166-063-2 o ARM ASSY, PRESS
903	3-176-584-01 o PULLY (B)
904	X-3166-065-1 o DECK (L) ASSY, PULLEY
905	X-3166-066-1 o DECK (R) ASSY, PULLEY
906	X-3166-067-1 o SLIDER (R) ASSY
907	X-3166-068-1 o SLIDER (L) ASSY
908	3-176-583-01 o PULLY (A)
909	X-3166-217-1 s MIRROR ASSY
910	1-690-106-12 s WIRE, FLEXIBLE CARD 5P
911	2-621-007-01 s BEARING, BALL, (B) (NO FRANGE)
912	3-171-367-03 o SWITCH (R), IN
913	3-171-398-03 o SWITCH (L), IN
914	3-171-399-01 o GUIDE (R), CASSETTE
915	3-171-400-03 o GUIDE (L), CASSETTE
916 917 918 919 920	3-171-420-01 o SHUTTER 3-171-421-01 o SLIDER, DOOR SWITCHING
921 922 923 924 925	3-171-424-01 o HOLDER, SENSOR 3-171-457-01 o SHAFT, JOINT 3-171-458-01 s BELT. TIMING
926	3-171-460-01 s ROLLER, SLIDER
927	3-171-461-01 o SHAFT, RETAINER, L CASSETTE
928	3-171-462-01 o HOLDER, SHAFT
929	3-171-463-02 o PLATE
930	3-171-464-01 o SPRING, LEAF
931 932	3-171-465-01 o GEAR, DRIVING 3-171-466-02 o GEAR, LIMITER S/N 10001 through 10295 When this part is replaced on the unit above S/N, replace the part No. 933 at the same time.
933	3-171-477-02 o WHEEL, WORM S/N 10001 through 10295 When this part is replaced on the unit above S/N, replace the part No. 932 at the same time.
934	3-171-478-01 o RUBBER, LIMITER
935	3-171-479-01 o GEAR, MIDWAY
936	3-171-480-01 o SHAFT, WORM WHEEL
937	3-171-508-02 o HOLDER, LAMP
938	3-171-510-02 s DOOR, CASSETTE
939	3-176-578-01 s SPRING, TENSION
940	3-548-757-00 s SPRING, TENSION
941	3-672-461-00 s SPRING, TENSION
942	3-579-759-00 s SPRING, COMPRESSION
943	3-646-214-00 s SPRING

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No.
             Part No.
                                     SP Description
             3-671-150-11 o CLAMP
3-677-193-00 o PIN, STOPPER
3-698-217-01 s BEARING (NO FLANGE), BALL
3-712-786-01 s DAMPER, OIL
944
945
946
947
             3-717-369-03 o STOPPER, DOOR
948
             4-858-799-00 s SPRING, TENSION
8-835-179-01 s MOTOR, DC MCB2B15
A-6751-474-A s CASSETTE COMPARTMENT ASSY
1-640-170-13 o PRINTED CIRCUIT BOARD, CL-25
949
950
951
953
             1-640-171-12 o PRINTED CIRCUIT BOARD, PC-62
             3-174-908-01 s STOPPER
3-176-139-01 s SPRING, C GUIDE
3-176-579-01 s SPRING, TENSION
3-176-598-02 o SPRING, GROUND
3-701-439-21 s WASHER POLY 3MMDIA., 0.50T
954
955
956
957
958
             3-701-441-11 s WASHER
3-701-443-21 s WASHER POLY 5MMDIA., 0.50T
959
960
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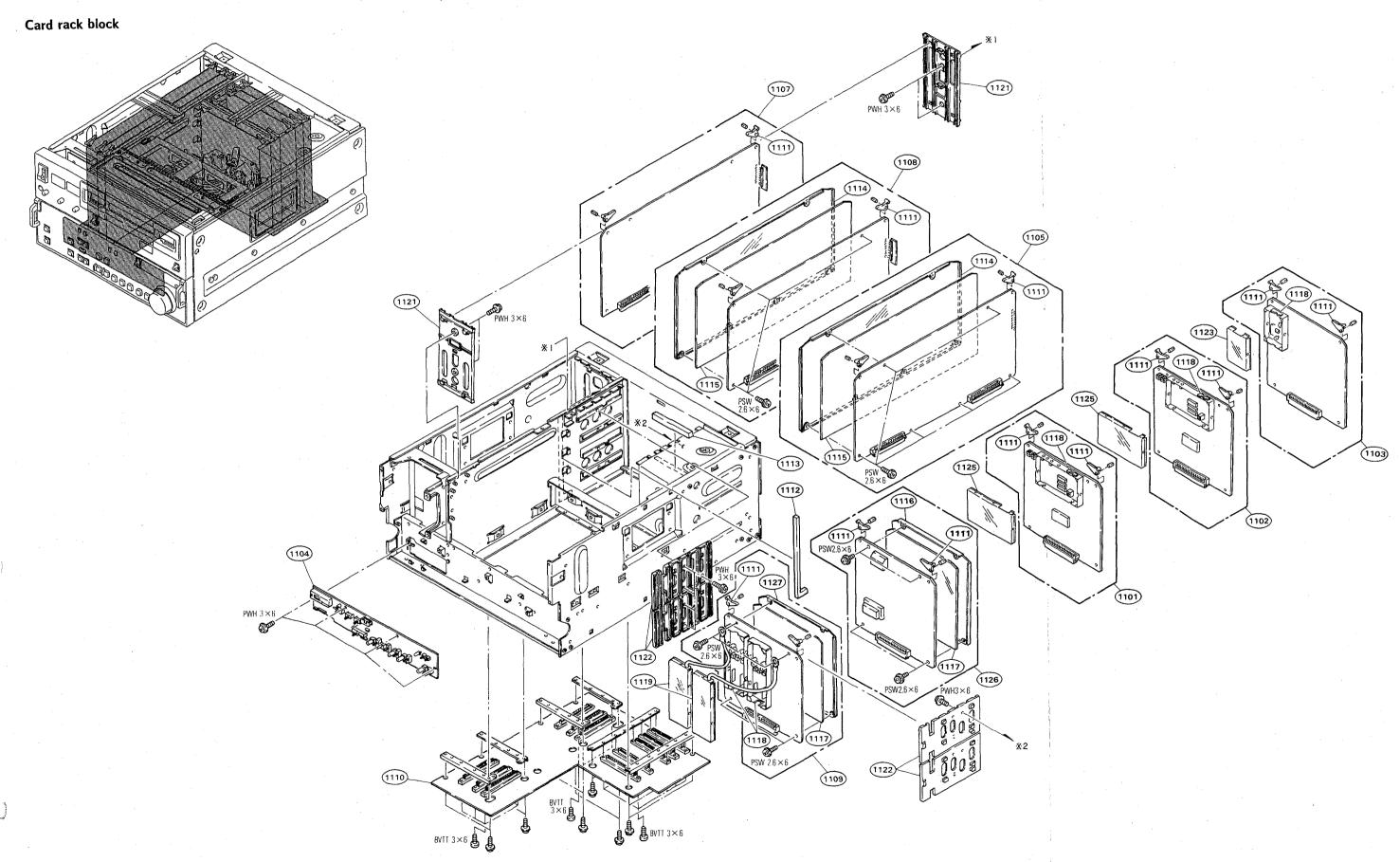


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No.
         Part No.
                        SP Description
        A-6703-711-F o LID ASSY, UPPER
A-6771-428-A s STAY ASSY, CASSETTE COMPARTMENT
1001
1002
         X-3166-071-1 s KNOB ASSY (B), VOL
X-3166-076-4 o HINGE (L) ASSY
X-3166-077-4 o HINGE (R) ASSY
1004
1005
1006
1007
        X-3642-018-0 o HANDLE ASSY
1008 △1-413-675-11 s REGULATOR, SWITCHING
       3-174-264-01 s SCREW (+) (B4×8)
         3-171-369-01 o LID (A), UPPER, AIR GUARD 3-171-377-01 o RETAINER (L), PC BOARD
1010
1011
1012
         3-171-408-01 o RETAINER (L), PC BOARD
1013
         3-171-409-01 o RETAINER (S), PC BOARD
1014
         3-171-410-01 o RETAINER (S), PC BOARD
         3-171-411-01 o RETAINER (RP), PC BOARD
1015
1016
         3-171-489-01 o BRACKET, PLATE, BOTTOM
         3-171-533-01 o CABINET (RIGHT)
3-171-534-01 o CABINET (LEFT)
3-171-535-01 o PLATE, BOTTOM
3-171-536-31 o PLATE, ORNAMENTAL, HC
1018
1019
1020
1021
         3-642-656-01 s FOOT
1022
         3-688-102-01 o SPACER, M4
3-717-306-01 o SPRING
3-717-394-03 o PLATE (SMALL), ORNAMENTAL, SW
1023
1024
1025
```

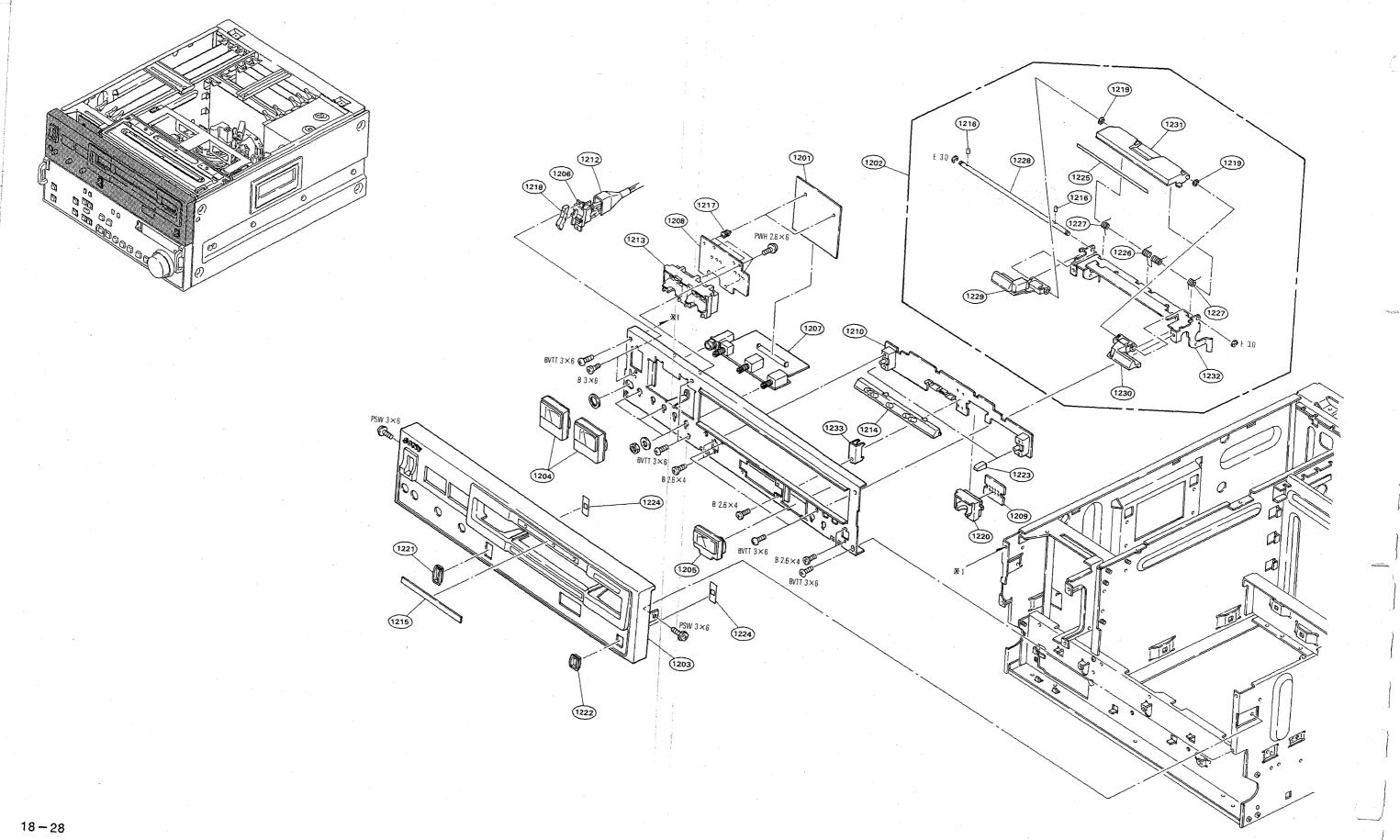
PVW-2650P

No.	Part No. SP Description
1101 1102	A-6713-472-A o MOUNTED CIRCUIT BOARD, AU-148AP A-6713-473-A o MOUNTED CIRCUIT BOARD, AU-149AP
1103	A-6713-456-A O MOUNTED CIRCUIT BOARD, AU-150A
1104 1105	
1107	A-8271-390-A o MOUNTED CIRCUIT BOARD, VP-33(BP)
	A-6727-378-A O MOUNTED CIRCUIT BOARD, TBC-18P
1109	
1110	
1111	2-251-622-11 s LEVER, PC BOARD
1112	2-251-622-11 s LEVER, PC BOARD  3-171-413-01 o GUARD (M), AIR 3-171-414-02 o GUARD (SW), AIR 3-171-453-03 o PLATE (L), SHIELD, CARD 3-171-454-02 o SHEET (L), CARD 3-171-455-01 o PLATE (S), SHIELD, CARD
1113	3-171-414-02 o GUARD (SW), AIR
1114	3-171-453-03 o PLATE (L), SHIELD, CARD
1115	3-171-454-02 o SHEET (L), CARD
1116	3-171-455-01 o PLATE (S), SHIELD, CARD
	3-171-456-02 o SHEET (S), CARD
1118	3-171-485-02 o GUARD, EDGE
1119	1-949-962-11 o HARNESS (RP SHIELD)
	3-171-525-02 o GUIDE (L), PCB
1122	3-171-527-01 o GUIDE (S), PCB
1123	
1125	3-172-941-02 o LID, AU SHIELD PLATE (1) A-8271-183-A o MOUNTED CIRCUIT BOARD, DT-30
1126	A-8271-183-A o MOUNTED CIRCUIT BOARD, DT-30
1127	X-3166-417-2 o PLATE (S) ASSY, SHIELD, CARD

18 - 26



Front panel block



```
1201
         A-8271-181-A o MOUNTED CIRCUIT BOARD, MA-44B
         A-6751-377-A o GUIDE ASSY, SC
1202
1203
         X-3166-565-1 o PANEL SUB ASSY, FRONT
        1-520-393-21 s METER, AUDIO LEVEL
1-520-494-21 s METER, VIDEO LEVEL
1204
1205
1-640-040-31 o PRINTED CIRCUIT BOARD, DP-138A
1208
1209
         1-640-042-31 o PRINTED CIRCUIT BOARD, DP-159A
        1-640-043-31 o PRINTED CIRCUIT BOARD, SW-444A
1210
         2-269-962-00 o COVER, SWITCH
         2-203-902-00 0 COVER, SWITCH
3-171-415-01 0 HOLDER, METER LED
3-171-416-01 0 HOLDER, LED
3-171-291-31 0 LABEL (P), MODEL
1213
1214
1215
         3-677-193-00 o PIN, STOPPER
1216
1217
         3-682-419-11 o HOLDER, P.C.B
         3-688-814-01 s CAP. SWITCH
1218
        3-701-441-21 s WASHER, POLY 4MM DIA., 0.50T 3-717-323-01 o COVER, METER LED 3-717-374-01 o FRAME (23X12), ORNAMENTAL, SW
1219
1220
1221
1222
         3-717-375-01 o FRAME (18X12), ORNAMENTAL, SW
1223
1224
         3-717-382-01 s KNOB, LEVER SW
3-717-613-01 o PLATE, ORNAMENTAL, LSW
         3-717-614-01 o LABEL, C-LOCK OUT
1225
        3-717-615-01 o SPRING
1226
         3-717-616-01 o SPRING
        3-717-617-01 o SHAFT, SC GUIDE
3-717-618-01 o GUIDE (LEFT), SC
3-717-619-01 o GUIDE (RIGHT), SC
1228
1229
1230
1231
         3-717-620-01 o PLATE, OUT, C-LOCK
        3\text{--}717\text{--}621\text{--}03 o PLATE, INDICATION, SC GUIDE 3\text{--}717\text{--}672\text{--}01 o STOPPER, KY
1232
1233
```

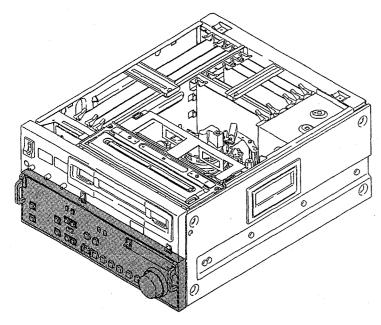
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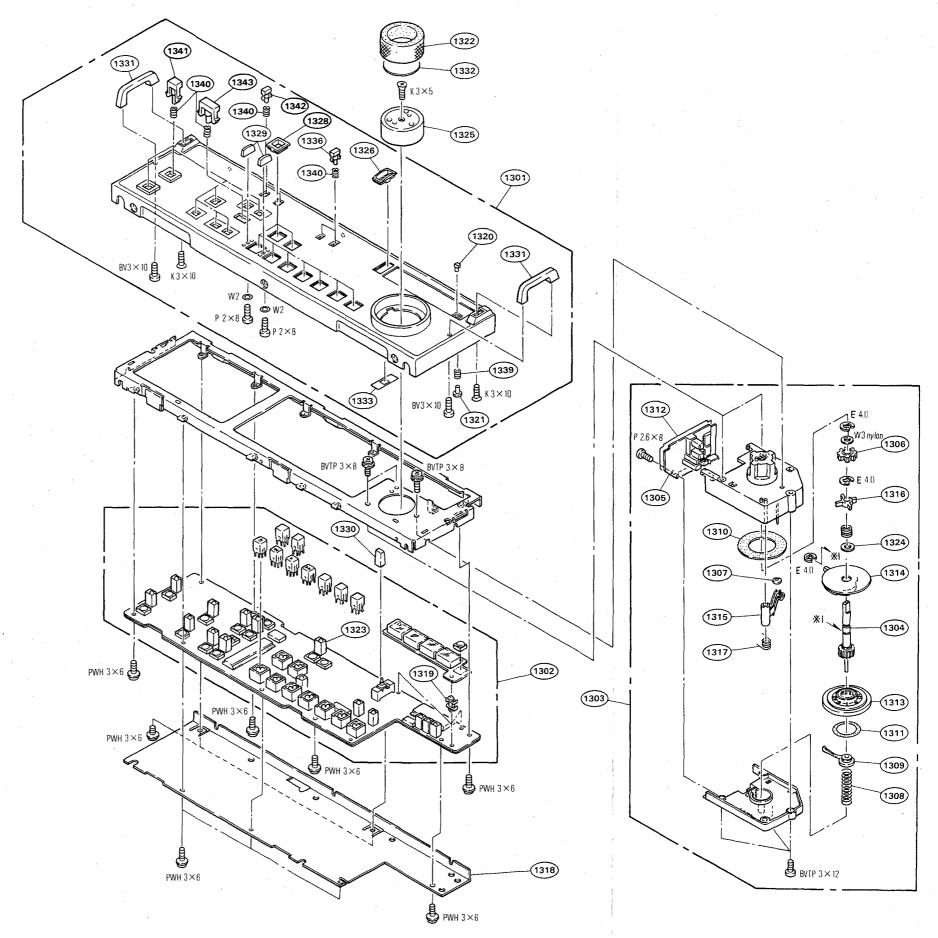
Part No.

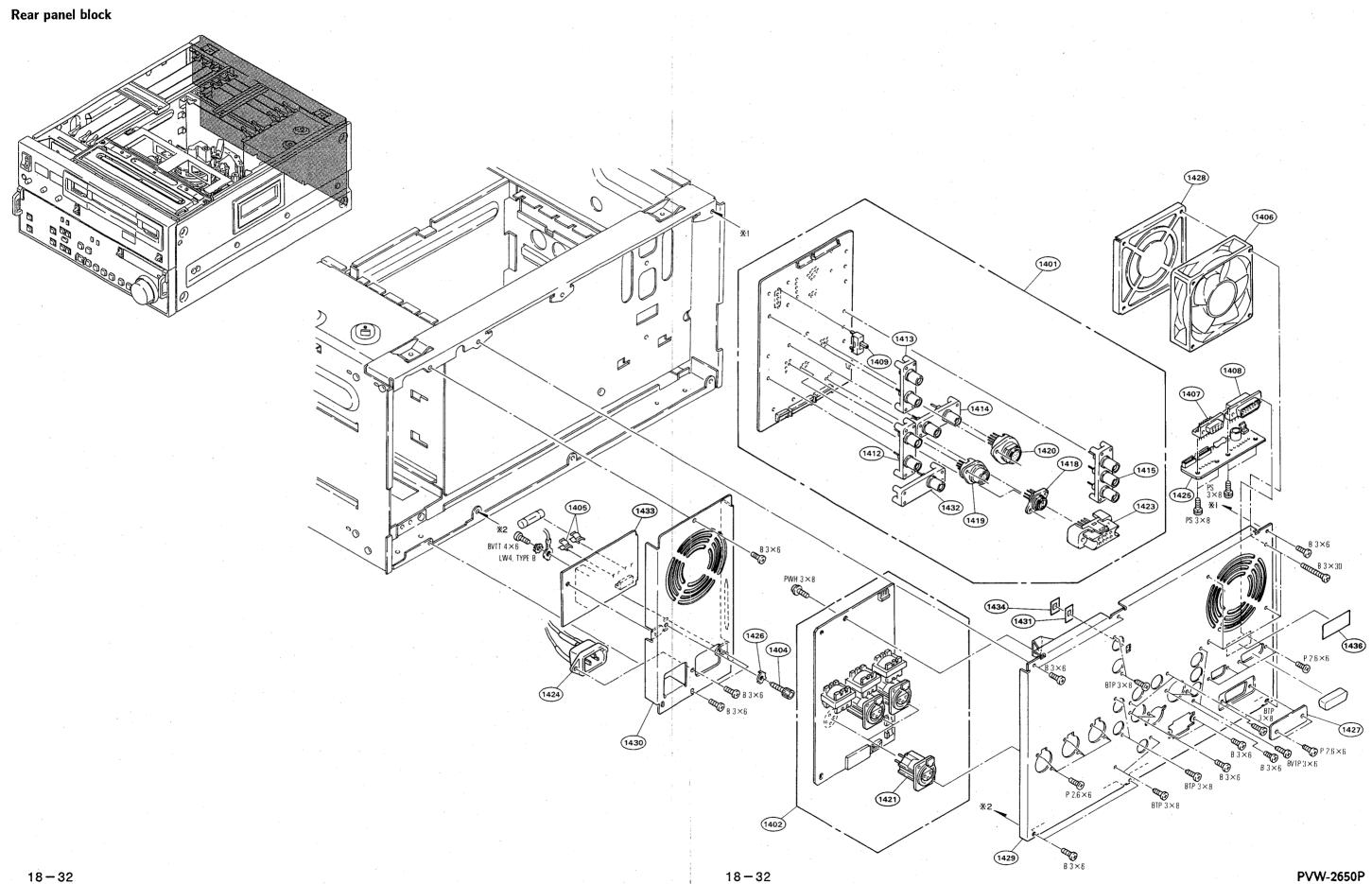
No.

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Part No.
                      SP Description
No.
1301
       A-8262-307-A o PANEL ASSY, KEY
       A-8271-182-A O MOUNTED CIRCUIT BOARD, KY-210B
1302
       A-6734-253-A O DIAL BLOCK ASSY, SERCH
X-2124-627-1 O SHAFT SUB ASSY, MAIN
1303
1304
       1-633-548-12 o PRINTED CIRCUIT BOARD, PTC-39
1305
        2-124-690-01 o GUIDE, LOCK IN
1307
        2-124-691-01 s ROLLER
       2-124-692-01 o SPRING, COMPRESSION
1308
        2-124-693-02 s PLATE
1309
       2-124-694-02 o PLATE, CLUTCH
        2-124-695-01 o PLATE, CUSHION
1311
       2-124-696-01 o PROTECTOR, PTC
1312
1313
        2-143-601-01 s RING, FG
       2-143-602-03 o CAM, SD
2-143-603-01 o ARM, RETURN
1314
1315
        2-143-604-01 o GUIDE, LOCK OUT
        2-143-613-01 s SPRING, TORSION
1317
        3-171-532-02 o PROTECTOR, KY
1318
        3-660-828-00 o HOLDER (9), PC BOARD
1319
        3-668-008-02 s PUSH BUTTON (3X5)
        3\text{--}668\text{--}009\text{--}02 s PIN, PUSH BUTTON 3\text{--}668\text{--}012\text{--}00 s RUBBER, DIAL KNOB
1322
1323
        3-668-124-00 o HOLDER, LED
        3-701-443-21 s WASHER, POLY 5MM DIA., 0.50T 3-717-370-01 o KNOB, DIAL
1324
1325
        3-717-374-01 o FRAME (23X12), ORNAMENTAL, SW 3-717-377-01 o FRAME (SQUARE 17), ORNAMENTAL
1326
1328
        3-717-380-01 o GUARD, REC
1329
        3-717-382-01 s KNOB, LEVER SW
3-717-425-21 o HANDLE
1330
1331
1332
        3-717-557-01 o PLATE, KNOB
        3-717-613-01 o PLATE, ORNAMENTAL, LSW
1333
1336
        3-718-681-01 s PUSH BUTTON
        4-309-349-00 s SPRING, COIL
1339
        4-866-613-00 s SPRING, COMPRESSION
1340
        3-718-664-01 s KEY TOP
1341
        3-718-681-11 s PUSH BUTTON
1342
        3-718-682-01 s PUSH BUTTON
1343
```

# Function control panel block







No.	Part No. SP Description
1401 1402 1404 1405 1406	A-6713-451-A o MOUNTED CIRCUIT BOARD, CP-166A A-6713-452-A o MOUNTED CIRCUIT BOARD, CP-167A X-2068-004-O s TERMINAL ASSY 1-533-189-11 s HOLDER, FUSE 1-541-431-31 s FAN, DC "FAN"
1407 1408 1409 1412 1413	1-563-770-11 s CONNECTOR, D-SUB 9P, FEMALE 1-566-319-11 o CONNECTOR, D-SUB 15P, FEMALE 1-570-157-51 s SWITCH, SLIDE 1-573-580-11 s CONNECTOR, BNC FEMALE 1-573-581-11 s CONNECTOR, BNC FEMALE
1414 1415 1418 1419 1420	1-573-584-11 s CONNECTOR, BNC FEMALE 1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE 1-573-591-11 s CONNECTOR, CIRCULAR 7P, FEMALE
1423 1424 1425	1-573-593-11 s CONNECTOR, XLR 3P, MALE 1-573-602-11 s CONNECTOR, 8P (MONITOR), FEMALE ▲1-580-375-21 o INLET, AC 3P, MALE 1-640-048-21 o PRINTED CIRCUIT BOARD, RM-93A 2-068-008-00 s WASHER
1427 1428 1429 1430 1431	3-171-451-01 o PANEL, OP 3-171-452-02 o COVER, FAN 3-171-530-31 o PANEL, CONNECTOR 3-171-531-01 o PANEL, POWER 3-717-394-03 o PLATE (SMALL), ORNAMENTAL, SW
1432 1433 1434 1436	1-641-145-12 o PRINTED CIRCUIT BOARD, AC-133

#### 18-3. ELECTRICAL PARTS LIST

AC-133 BOARD		
Ref. No	o. y Part No. SP Description	
1pc 2pcs 1pc	1-641-145-12 o PRINTED CIRCUIT BOARD, AC-133 1-533-189-11 s HOLDER, FUSE 3-701-947-18 s LABEL (T4A), FUSE	
C4	⚠1-136-185-00 s FILM 0.22uF 20% 250V ⚠1-161-741-00 s CERAMIC 1000PF 10% 400V ⚠1-161-741-00 s CERAMIC 1000PF 10% 400V №1-161-740-00 s CERAMIC 470PF 10% 400V №1-161-741-00 s CERAMIC 1000PF 10% 400V	
C6 C7	<u>↑1-161-741-00</u> s CERAMIC 1000PF 10% 400V ↑1-161-740-00 s CERAMIC 470PF 10% 400V	
CN998 CN999	<u>↑</u> 1-564-241-00 o CONNECTOR 4P, MALE ↑1-564-241-00 o CONNECTOR 4P, MALE	
F1	<u>↑1-532-350-00</u> s FUSE 4A 250V	
R1	<u>1-260-135-11</u> s CARBON 1M 5% 1/2W	

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AU-148AP BOARD
Ref. No. or Q'ty Part No.
                                                    SP Description
                      A-6713-472-A O MOUNTED CIRCUIT BOARD, AU-148AP 3-171-456-02 O SHEET (S), CARD 3-171-485-02 O GUARD, EDGE 3-173-739-03 O SHIELD (B), AU 7-621-759-45 s SCREW +PSW 2.6X6
1pc
1pc
1pc
2pcs
                      2-251-622-11 s LEVER, PC BOARD
                     1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V
1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C105
C106
C107
C108
                      1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V
1-163-023-00 s CERAMIC, CHIP 0.015uF 5% 50V
1-126-101-11 s ELECT 100uF 20% 16V
1-124-907-11 s ELECT 10uF 20% 50V
C111
C112
C113
C114
                      1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
C115
                      1-130-481-00 s MYLAR 0.0068uF 5% 50V
1-126-233-11 s ELECT 22uF 20% 50V
1-126-233-11 s ELECT 22uF 20% 50V
1-126-233-11 s ELECT 22uF 20% 50V
C117
C118
C119
                       1-130-487-00 s MYLAR 0.022uF 5% 50V
                      1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-130-487-00 s MYLAR 0.022uF 5% 50V 1-130-487-00 s MYLAR 0.022uF 5% 50V
C122
C123
C124
                       1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
C125
                      1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-130-487-00 s MYLAR 0.022uF 5% 50V 1-130-487-00 s MYLAR 0.022uF 5% 50V 1-130-487-00 s MYLAR 0.022uF 5% 50V
C126
C127
C128
C129
                       1-130-487-00 s MYLAR 0.022uF 5% 50V
                      1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
1-130-473-00 s MYLAR 0.0015uF 5% 50V
C131
C132
C133
C134
                       1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
                      1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
1-124-907-11 s ELECT 10uF 20% 50V
1-164-182-11 s CERAMIC, CHIP 3300PF 10% 100V
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C136
C137
C138
C139
                      1-130-483-00 s MYLAR 0.01uF 5% 50V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C202
C203
C204
C205
C206
                       1-124-907-11 s ELECT 10uF 20% 50V
                      1-124-307-11 S ELECT 100F 20% 30V

1-164-232-11 S CERAMIC, CHIP 0.01uF 10% 100V

1-164-232-11 S CERAMIC, CHIP 0.01uF 10% 100V

1-124-925-11 S ELECT 2.2uF 20% 100V

1-124-907-11 S ELECT 10uF 20% 50V
C208
C209
C210
                      1-136-684-11 s FILM 0.0022uF 2% 100V
1-136-684-11 s FILM 0.0022uF 2% 100V
1-136-682-11 s FILM 0.0039uF 2% 100V
1-131-345-00 s TANTALUM 0.47uF 10% 35V
1-130-497-00 s MYLAR 0.15uF 5% 50V
C214
C215
C216
C217
                      1-130-738-00 s FILM 0.015uF 1% 100V 1-130-499-00 s MYLAR 0.22uF 5% 50V
C218
C219
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(AU-148A	P BOARD)	(AU-148AP BOARD)	
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description	
C220 C221 C222 C223 C224	1-163-833-00 s CERAMIC, CHIP 0.068uF 25V 1-130-765-00 s FILM 0.056uF 2% 100V 1-136-683-11 s FILM 0.0056uF 2% 100V 1-130-736-11 s FILM 0.01uF 1% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	IC206 8-759-701-21 s IC NJM5532D-D IC207 8-759-701-21 s IC NJM5532D-D IC503 8-759-982-21 s IC RC78L05A IC504 8-759-982-44 s IC RC79L05A	
	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	L501 1-410-470-11 s INDUCTOR 10uH	
C226 C227 C228 C229	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V 1-124-907-11 s ELECT 10uF 20% 50V 1-130-478-00 s MYLAR 0.0039uF 5% 50V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	LV101 1-410-934-21 s COIL, VAR 7.1uH  Q105 8-729-109-44 s TRANSISTOR 2SK94 Q106 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 Q107 8-729-209-07 s TRANSISTOR 2SC4213-B	
0404	1 104 202 II B OHEMITO, OHIT O.OIGE 100 1001		
C233 C234	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-124-477-11 s ELECT 47uF 20% 25V	Q110 8-729-209-07 s TRANSISTOR 2SC4213-B Q111 8-729-209-07 s TRANSISTOR 2SC4213-B Q112 8-729-209-07 s TRANSISTOR 2SC4213-B	
C235 C236 C243	1-130-483-00 s MYLAR 0.01uF 5% 50V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V 1-163-037-11 s CERAMIC CHIP 0.022uF 10% 25V	Q201 8-729-140-63 S TRANSISTOR 2SA1611-M5M6 Q202 8-729-109-44 S TRANSISTOR 2SK94	
C244 C245	1-130-483-00 s MYLAR 0.01uF 5% 50V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	Q205 8-729-203-30 s TRANSISTOR 2SJ106Y Q206 8-729-109-44 s TRANSISTOR 2SK94 Q207 8-729-209-07 s TRANSISTOR 2SC4213-B Q208 8-729-209-07 s TRANSISTOR 2SC4213-B Q209 8-729-118-58 s TRANSISTOR 2SK852-X4	
C246 C247 C248	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-130-478-00 s MYLAR 0.0039uF 5% 50V 1-124-925-11 s ELECT 2.2uF 20% 100V	Q208 8-729-209-07 s TRANSISTOR 2SC4213-B Q209 8-729-118-58 s TRANSISTOR 2SK852-X4	
C249 C336	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-130-478-00 s MYLAR 0.0039uF 5% 50V 1-124-925-11 s ELECT 2.2uF 20% 100V 1-124-925-11 s ELECT 2.2uF 20% 100V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	Q210 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 Q211 8-729-118-58 s TRANSISTOR 2SK852-X4 Q212 8-729-905-12 s TRANSISTOR DTA144EU	
C501 C502	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	Q211 8-729-118-58 S TRANSISTOR 2SK852-X4 Q212 8-729-905-12 S TRANSISTOR DTA144EU Q501 8-729-106-68 S TRANSISTOR 2SC1615A-GP Q502 8-729-805-25 S TRANSISTOR 2SB1121-S	
C503 C504 C505	1-124-477-11 S ELECT 470F 20% 25V 1-163-037-11 S CERAMIC, CHIP 0.0220F 10% 25V 1-124-477-11 S ELECT 470F 20% 25V	R110 1-216-009-00 s METAL, CHIP 22 5% 1/10W R111 1-249-393-11 s CARBON 10 5% 1/4W	
C506 C507 C508	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-126-101-11 s FLECT 100uF 20% 16V	R114 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R116 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W	
C509 C510	1-126-101-11 s ELECT 100uF 20% 16V 1-124-477-11 s ELECT 47uF 20% 25V	R117 1-216-105-00 s METAL, CHIP 220K 5% 1/10W R118 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W R119 1-216-625-11 s METAL, CHIP 82 0.5% 1/10W	
C511 C512 C513	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V  1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-126-101-11 s ELECT 100uF 20% 16V 1-126-101-11 s ELECT 100uF 20% 16V 1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-126-101-11 s ELECT 100uF 20% 16V 1-126-101-11 s ELECT 100uF 20% 16V	R120 1-216-121-00 S METAL, CHIP 1M 5% 1/10W R121 1-216-071-00 S METAL, CHIP 8.2K 5% 1/10W	
CN2 CN111	1-506-468-11 s CONNECTOR 3P, MALE 1-573-600-21 s CONNECTOR, PHEC 100P, MALE	R123 1-216-081-00 s METAL, CHIP 22K 5% 1/10W R124 1-216-121-00 s METAL, CHIP 1M 5% 1/10W R125 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	
D103 D104 D201	8-719-123-85 s DIODE 1SS304 8-719-123-85 s DIODE 1SS304 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U	R126 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W R127 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W	
D202 D204	8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U	R128 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R129 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R130 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	
D206 D207 D208	8-719-941-23 s DIODE DA204U	R131 1-216-073-00 s METAL, CHIP 10K 5% 1/10W  R132 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	
D209 IC101	8-759-711-53 s IC NJM2068D-D		
IC102 IC103 IC104	8-759-711-53 s IC NJM2068D-D 8-759-711-53 s IC NJM2068D-D 8-759-711-53 s IC NJM2068D-D	R136 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W R137 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W	
IC201 IC202	8-759-981-90 s IC NJM4558D-D	R138 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W R139 1-215-473-00 s METAL 150K 1% 1/6W R140 1-216-681-11 s METAL, CHIP 18K 0.5% 1/10W	
IC203 IC204 IC205	8-759-981-90 s IC NJM4558D-D 8-752-018-80 s IC CX20188 8-759-745-60 s IC NJM4560D	R142 1-215-471-00 s METAL 120K 1% 1/6W #R143 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W	

AU-149AP	BOARD		(AU-149A	P BOARD)
Ref. No. or Q'ty	Part No. SP Description		Ref. No. or Q'ty	Part No. SP Description
1pc 1pc 1pc 1pc 1pc	A-6713-473-A O MOUNTED CIRCUIT BOARD, AU-149AP 3-171-456-02 O SHEET (S), CARD 3-171-485-02 O GUARD, EDGE 3-173-739-03 O SHIELD (B), AU 7-621-759-45 S SCREW +PSW 2.6X6		C220 C221 C222 C223 C224	1-163-833-00 s CERAMIC, CHIP 0.068uF 25V 1-130-765-00 s FILM 0.056uF 2% 100V 1-136-683-11 s FILM 0.0056uF 2% 100V 1-130-736-11 s FILM 0.01uF 1% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
2pcs	2-251-622-11 s LEVER, PC BOARD		C225 C226	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
C105 C106 C107 C108	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V 1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V		C227 C228 C229	1-124-907-11 s ELECT 10uF 20% 50V 1-130-478-00 s MYLAR 0.0039uF 5% 50V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C109 C111	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V 1-163-023-00 s CERAMIC, CHIP 0.015uF 5% 50V		C231 C232	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
C112 C113 C114	1-126-101-11 s ELECT 100uF 20% 16V		C233 C234	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-124-477-11 s ELECT 47uF 20% 25V
C115 C116	1-124-907-11 S BLECT TOUF 20% 50V 1-164-232-11 S CERAMIC, CHIP 0.01uF 10% 100V 1-130-481-00 S MYLAR 0.0068uF 5% 50V		C235 C236 C243	1-130-483-00 s MYLAR 0.01uF 5% 50V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C117 C118 C119	1-126-233-11 s ELECT 22uF 20% 50V 1-126-233-11 s ELECT 22uF 20% 50V 1-126-233-11 s ELECT 22uF 20% 50V		C244 C245	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C120	1-130-487-00 s MYLAR 0.022uF 5% 50V		C246 C247	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-130-478-00 s MYLAR 0.0039uF 5% 50V
C121 C122 C123	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-130-487-00 s MYLAR 0.022uF 5% 50V		C248 C249 C336	1-124-925-11 s ELECT 2.2uF 20% 100V 1-124-925-11 s ELECT 2.2uF 20% 100V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V
C124 C125	1-130-487-00 s MYLAR 0.022uF 5% 50V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V		C501 C502	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C126 C127	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-130-487-00 s MYLAR 0.022uF 5% 50V		C503 C504 C505	1-124-477-11 S ELECT 47uF 20% 25V 1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 S ELECT 47uF 20% 25V
C128 C129 C130	1-130-487-00 s MYLAR 0.022uF 5% 50V 1-130-487-00 s MYLAR 0.022uF 5% 50V 1-130-487-00 s MYLAR 0.022uF 5% 50V		C506	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C131 C132	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	•	C507 C508 C509	1-124-477-11 s ELECT 47uF 20% 25V 1-126-101-11 s ELECT 100uF 20% 16V 1-126-101-11 s ELECT 100uF 20% 16V
C133 C134 C135	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-130-473-00 s MYLAR 0.0015uF 5% 50V 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V		C510 C511	1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V
C136	1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V			1-126-101-11 s ELECT 100uF 20% 16V 1-126-101-11 s ELECT 100uF 20% 16V
C137 C138 C139	1-124-907-11 s ELECT 10uF 20% 50V 1-164-182-11 s CERAMIC, CHIP 3300PF 10% 100V		CN2 CN110	1-506-468-11 s CONNECTOR 3P, MALE 1-573-600-21 s CONNECTOR, PHEC 100P, MALE
C201 C202	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-130-483-00 s MYLAR 0.01uF 5% 50V		D103 D104	8-719-123-85 s DIODE 1SS304 8-719-123-85 s DIODE 1SS304
C203 C204 C205	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V		D201 D202 D204	8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U
C206	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V		D206	8-719-941-23 s DIODE DA204U
C207 C208 C209	1-124-907-11 s ELECT 10uF 20% 50V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V		D207 D208 D209	8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-123-85 s DIODE 1SS304
C210 C212	1-124-925-11 s ELECT 2.2uF 20% 100V 1-124-907-11 s ELECT 10uF 20% 50V		IC101 IC102	8-759-711-53 s IC NJM2068D-D 8-759-711-53 s IC NJM2068D-D
C213 C214 C215	1-136-684-11 s FILM 0.0022uF 2% 100V 1-136-684-11 s FILM 0.0022uF 2% 100V 1-136-682-11 s FILM 0.0039uF 2% 100V		IC103 IC104 IC201	8-759-711-53 s IC NJM2068D-D 8-759-711-53 s IC NJM2068D-D 8-759-981-90 s IC NJM4558D-D
C216 C217	1-131-345-00 s TANTALUM 0.47uF 10% 35V 1-130-497-00 s MYLAR 0.15uF 5% 50V		IC202	8-759-981-90 s IC NJM4558D-D
C218 C219	1-130-738-00 s FILM 0.015uF 1% 100V 1-130-499-00 s MYLAR 0.22uF 5% 50V		IC203 IC204 IC205	8-759-981-90 s IC NJM4558D-D 8-752-018-80 s IC CX20188 8-759-745-60 s IC NJM4560D

NOTE: For the # marked in the following parts list, refer to Section 19 " CHANGED PARTS ".

(AU-149A)	P BOARD)	AU-150A I	BOARD
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
R244 R245 R246 R247	1-216-121-00 s METAL, CHIP 1M 5% 1/10W	1pc 1pc 2pcs	A-6713-456-A O MOUNTED CIRCUIT BOARD, AU-150A 3-171-485-02 O GUARD, EDGE 2-251-622-11 s LEVER, PC BOARD
R248 R249	1-216-121-00 s METAL, CHIP 1M 5% 1/10W	C6 C7 C10	1-126-101-11 s ELECT 100uF 20% 16V 1-130-489-00 s MYLAR 0.033uF 5% 50V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
R250 R251 R252	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W	C11 C202	1-124-907-11 s ELECT 10uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
R256 R262	1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W	C203 C204 C501	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
R263 R264 R265	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	C502 C503	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V
R266 R267	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-085-00 s METAL, CHIP 33K 5% 1/10W	C504 C505 C508	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-126-101-11 s ELECT 100uF 20% 16V
R268 R269 R270	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W	C510 C511	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
R271 R272	1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-081-00 s METAL. CHIP 22% 5% 1/10W	C512 C513	1-124-477-11 s ELECT 47uF 20% 25V 1-126-101-11 s ELECT 100uF 20% 16V
R273 R274 R275	1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W	CN1 CN109	1-506-468-11 s CONNECTOR 3P, MALE 1-573-600-21 s CONNECTOR, PHEC 100P, MALE
R276 R277	1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W	D2 D3	8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U
R279 R280 R281 R282		IC4 IC202 IC203	8-759-153-69 s IC UPC4572C 8-757-991-00 s IC CX7991 8-757-991-00 s IC CX7991
R283 R284		L501 L502	1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH
R285 R288 R301	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	Q201 Q203 Q204 Q205	8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-143-07 s TRANSISTOR 2SA1610-YY33
R343 R501 R502	1-216-668-11 s METAL, CHIP 5.1K 0.5% 1/10W 1-249-411-11 s CARBON 330 5% 1/4W 1-249-411-11 s CARBON 330 5% 1/4W	Q207 Q208	8-729-143-07 s TRANSISTOR 2SA1610-YY33 8-729-143-07 s TRANSISTOR 2SA1610-YY33
R503 R504	1-216-031-00 s METAL, CHIP 180 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W	Q209 Q210 Q213	8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-905-12 s TRANSISTOR DTA144EU
R505 R506	1-216-035-00 s METAL, CHIP 270 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W	Q214 Q215	8-729-905-12 s TRANSISTOR DTA144EU 8-729-905-12 s TRANSISTOR DTA144EU
RV101 RV102 RV103 RV104 RV105	1-238-791-11 s RES, ADJ METAL 200K 1-238-786-11 s RES, ADJ METAL 5K 1-238-786-11 s RES, ADJ METAL 5K 1-238-788-11 s RES, ADJ METAL 20K 1-238-801-11 s RES, ADJ METAL 5K	Q216 Q217 Q218 Q221	8-729-905-12 S TRANSISTOR DTA144EU 8-729-905-12 S TRANSISTOR DTA144EU 8-729-905-18 S TRANSISTOR DTC144EU 8-729-905-12 S TRANSISTOR DTA144EU
RV106	1-238-788-11 s RES, ADJ METAL 20K	Q222 Q501	8-729-905-18 s TRANSISTOR DTC144EU 8-729-106-68 s TRANSISTOR 2SC1615A-GP
RV201 RV203 RV204 RV301	1-238-801-11 s RES, ADJ METAL 5K 1-238-805-11 s RES, ADJ METAL 100K 1-238-805-11 s RES, ADJ METAL 100K 1-238-804-11 s RES, ADJ METAL 50K	R12 R13 R15 R16	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
SW101	1-570-598-11 s SWITCH, DIP 4-CKT	R17 R18	1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-295-00 s METAL, CHIP 0
		R22 R24 R27 R28	1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W

# (AU-150A BOARD)

Ref. No. or Q'ty	Part No. SP Description
R32 R33 R34 R44 R201	1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-295-00 s METAL, CHIP 0 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-061-00 s METAL, CHIP 3.3% 5% 1/10W
R202 R203 R204 R205 R207	1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
R208 R209 R211 R212 R213	1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R215 R216 R220 R222 R223	1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R224 R225 R226 R227 R228	1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R229 R230 R231 R501	1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-249-411-11 s CARBON 330 5% 1/4W

## CL-25 BOARD

Ref. No. or Q'ty	Part No. SP Description
#1pc 1pc	1-640-170-13 o PRINTED CIRCUIT BOARD, CL-25 3-171-424-01 o HOLDER, SENSOR
C1	1-161-051-00 s CERAMIC 0.01uF 10% 50V
CN930	1-506-477-11 s CONNECTOR 12P, MALE
CN931	1-506-467-11 s CONNECTOR 2P, MALE
CN933	1-573-599-11 s CONNECTOR 5P, FEMALE
CN935	1-506-467-11 s CONNECTOR 2P, MALE
D1	8-719-938-07 s LED GL480, INFRARED
D2	8-719-938-07 s LED GL480, INFRARED
Q1	8-729-903-81 s PHOTOTRANSISTOR PT480
Q2	8-729-903-81 s PHOTOTRANSISTOR PT480
R1	1-249-414-11 s CARBON 560 5% 1/4W
R2	1-249-414-11 s CARBON 560 5% 1/4W

CP-166A	BOARD	CP-167A	BOARD
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
1pc	A-6713-451-A O MOUNTED CIRCUIT BOARD, CP-166A	1pc	A-6713-452-A o MOUNTED CIRCUIT BOARD, CP-167A
C1	1-126-101-11 s ELECT 100uF 20% 16V	C101	1-124-907-11 s ELECT 10uF 20% 50V
C3	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C102	1-124-910-11 s ELECT 47uF 20% 50V
C4	1-126-101-11 s ELECT 100uF 20% 16V	C103	1-124-473-11 s ELECT 1000uF 20% 10V
C7	1-126-101-11 s ELECT 100uF 20% 16V	C104	1-124-907-11 s ELECT 10uF 20% 50V
C8	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C105	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C9 C10 C11 C12 C13	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-126-101-11 s ELECT 100uF 20% 16V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C106 C107 C108 C109 C111	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V 1-124-473-11 s ELECT 1000uF 20% 10V
C14	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C112	1-163-038-00 s CERAMIC, CHIP 0.1uF 25V
C15		C201	1-124-907-11 s ELECT 10uF 20% 50V
C16		C202	1-124-910-11 s ELECT 47uF 20% 50V
C17		C203	1-124-473-11 s ELECT 1000uF 20% 10V
C18		C204	1-124-907-11 s ELECT 10uF 20% 50V
CN1	1-573-581-11 s CONNECTOR, BNC, FEMALE	C205	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
CN6	1-573-583-11 s CONNECTOR, BNC, FEMALE	C206	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
CN7	1-573-580-11 s CONNECTOR, BNC, FEMALE	C207	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
CN8	1-573-582-11 s CONNECTOR, BNC, FEMALE	C208	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
CN9	1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE	C209	1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V
CN10	1-573-584-11 s CONNECTOR, BNC, FEMALE	C210	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
CN11	1-573-592-11 s CONNECTOR, CIRCULAR 12P, FEMALE	C211	1-124-473-11 s ELECT 1000uF 20% 10V
CN12	1-573-591-11 s CONNECTOR, CIRCULAR 7P, FEMALE	C212	1-163-038-00 s CERAMIC, CHIP 0.1uF 25V
CN13	1-573-602-11 s CONNECTOR 8P (MONITOR), FEMALE	C302	1-124-119-00 s ELECT 330uF 20% 16V
CN650	1-506-490-21 s CONNECTOR 11P, MALE	C303	1-124-907-11 s ELECT 10uF 20% 50V
CN652 CN653 CN654 CN655	1-506-481-11 s CONNECTOR 2P, MALE 1-506-489-11 s CONNECTOR 10P, MALE 1-506-493-11 s CONNECTOR 14P, MALE 1-506-483-21 s CONNECTOR 4P, MALE	C304 C305 C306 C307 C308	1-124-473-11 s ELECT 1000uF 20% 10V 1-124-907-11 s ELECT 10uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-119-00 s ELECT 330uF 20% 16V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
IC1	8-752-052-73 s IC CXA1451M	C309	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
IC2		C311	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
IC3		C312	1-124-907-11 s ELECT 10uF 20% 50V
IC4		C313	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
L1	1-410-482-31 s INDUCTOR 100uH	C314	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
L2	1-410-482-31 s INDUCTOR 100uH	C315	1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V
Q1 R1 R2	8-729-117-32 s TRANSISTOR 2SC4177 1-216-009-00 s METAL, CHIP 22 5% 1/10W 1-216-077-00 s METAL, CHIP 15K 5% 1/10W	C316 C317 C318 C319	1-124-473-11 S ELECT 1000uF 20% 10V 1-124-907-11 S ELECT 100UF 20% 50V 1-163-038-00 S CERAMIC, CHIP 0.1uF 25V 1-163-038-00 S CERAMIC, CHIP 0.1uF 25V
R3	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	C501	1-124-925-11 s ELECT 2.2uF 20% 100V
R4	1-216-045-00 s METAL, CHIP 680 5% 1/10W	C502	1-124-907-11 s ELECT 10uF 20% 50V
R10	1-216-009-00 s METAL, CHIP 22 5% 1/10W	C503	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
R11	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	C504	1-124-925-11 s ELECT 2.2uF 20% 100V
R12	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	C505	1-124-907-11 s ELECT 10uF 20% 50V
R13 R14 R15	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W 1-216-624-11 s METAL, CHIP 75 0.5% 1/10W 1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	C506 C507	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-907-11 s ELECT 10uF 20% 50V
R16	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	CN601	1-506-481-11 s CONNECTOR 2P, MALE
R17	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	CN602	1-506-485-11 s CONNECTOR 6P, MALE
R18	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	CN603	1-506-484-11 s CONNECTOR 5P, MALE
R19	1-216-624-11 s METAL, CHIP 75 0.5% 1/10W	CN607	1-573-593-11 s CONNECTOR, XLR 3P, MALE
R20	1-216-625-11 s METAL, CHIP 82 0.5% 1/10W	CN608	1-573-593-11 s CONNECTOR, XLR 3P, MALE
<b>S</b> 1	1-570-157-51 s SWITCH, SLIDE	CN609	1-573-593-11 s CONNECTOR, XLR 3P, MALE
		D101 D102 D103	8-719-941-23 s DIODE DA204U 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1

1-216-295-00 s METAL, CHIP 0

R130

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(CP-167A BOARD)
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Ref No

or Q'ty	Part No. SP Description
R336 R337 R338 R501 R502	1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R503	1-216-067-00 s METAL, CHIP 5.6% 5% $1/10$ W
T101 T201 T301	1-427-586-11 s TRANSFORMER, INPUT/OUTPUT 1-427-586-11 s TRANSFORMER, INPUT/OUTPUT 1-427-586-11 s TRANSFORMER, INPUT/OUTPUT

## DE-15 BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc 1-622-606-11 o PRINTED CIRCUIT BOARD, DE-15
1pc 1-807-683-11 s DME

C1 1-126-101-11 s ELECT 100uF 20% 16V

#### DP-138B BOARD

Ref. No. or Q'ty Part No. SP Description 1-640-040-31 o PRINTED CIRCUIT BOARD, DP-138A 3-171-415-01 o HOLDER, METER LED 1pc 1pc C1 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V CN490 1-506-481-11 o CONNECTOR 2P, MALE 8-719-820-27 s LED TLY-256, YEL Ď2 D3 **D4** D5 8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL D6 D7 D8 1-249-409-11 s CARBON 220 5% 1/4W R1 R2 R3

#### DP-139B BOARD

Ref. No. or Q'ty Part No. SP Description

All of component parts on the DP-139B board are supplied together when you order KY-210B board.

D1060 8-719-942-19 s LED LB402VK, RED D1061 8-719-942-19 s LED LB402VK, RED D1062 8-719-942-19 s LED LB402VK, RED D1063 8-719-942-19 s LED LB402VK, RED S1037 1-552-539-00 s SWITCH, PUSH

### DP-159B BOARD

Ref. No. or Q'ty	Part No. SP	Description
1pc 1pc	1-640-042-31 o 3-717-323-01 o	PRINTED CIRCUIT BOARD, DP-159A COVER, METER LED
C1	1-163-037-11 s	CERAMIC, CHIP 0.022uF 10% 25V
CN514	1-506-481-11 0	CONNECTOR 2P, MALE
D1 D2 D3 D4	8-719-820-27 s 8-719-820-27 s 8-719-820-27 s 8-719-820-27 s	LED TLY-256, YEL LED TLY-256, YEL LED TLY-256, YEL LED TLY-256, YEL
R1 R2	1-249-409-11 s 1-249-409-11 s	CARBON 220 5% 1/4W CARBON 220 5% 1/4W

DR-118A	BOARD	(DR-118A	BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
1pc 1pc 1pc 1pc 1pc	A-6717-623-B O MOUNTED CIRCUIT BOARD, DR-118A 3-171-393-01 O SUPPORT, DR 3-176-490-01 O HEAT SINK (1), DR 3-176-491-01 O HEAT SINK (2), DR 3-701-822-00 O HOLDER, WIRE	C301 C302 C303 C304 C305	1-124-482-11 s ELECT 33uF 20% 35V 1-164-161-11 s CERAMIC, CHIP 0.0022uF 10% 100V 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V 1-124-903-11 s ELECT 1uF 20% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1pc 1pc 1pc 3pcs 1pc	7-621-759-45 s SCREW +PSW 2.6X6 7-682-903-11 s SCREW +PWH 3X6 3-660-978-00 s SHEET, HEAT RESISTING 7-682-903-11 s SCREW +PWH 3X6 3-171-493-01 o HEAT SINK (A)	C306 C307 C308 C309 C315	1-163-833-00 s CERAMIC, CHIP 0.068uF 25V 1-163-833-00 s CERAMIC, CHIP 0.068uF 25V 1-163-833-00 s CERAMIC, CHIP 0.068uF 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-126-233-11 s ELECT 22uF 20% 50V
4pcs 3pcs 4pcs 3pcs 4pcs	4-911-232-01 s SHEET, INSULATING 3-660-978-00 s SHEET, HEAT RESISTING 7-682-548-04 s SCREW +B 3X8 2-371-561-00 s BUSHING (P), INSULATING 7-682-548-04 s SCREW +B 3X8	C316 C322 C323 C330 C401	1-124-903-11 s ELECT 1uF 20% 50V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-124-120-11 s ELECT 220uF 20% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1pc 3pcs	1-535-894-11 o TAB, FASTON 3-314-051-00 o CLAMP, LEAD	C402 C403 C404	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-131-388-00 s TANTALUM 68uF 10% 6.3V 1-131-388-00 s TANTALUM 68uF 10% 6.3V
C1 C40 C51	1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V 1-163-809-11 S CERAMIC, CHIP 0.047UF 10% 25V 1-163-037-11 S CEPAMIC CHIP 0.022UF 10% 25V	C405 C406	1-131-360-00 S TANTALON GOLF 10% 0.3V 1-124-907-11 S ELECT 10uF 20% 50V 1-124-477-11 S ELECT 47uF 20% 25V
C52 C53	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C407 C408 C409	1-126-233-11 s ELECT 22uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C101 #C103 C104	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-124-478-11 s ELECT 100uF 20% 25V 1-124-907-11 s ELECT 10uF 20% 50V	C410 C451	1-163-989-11 s CERAMIC, CHIP 0.033uF 10% 25V 1-130-728-00 s FILM 0.0022uF 1% 100V
C108 C111	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-124-907-11 s ELECT 10uF 20% 50V	C452 C453 C454	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C121 C151 C152	1-124-907-11 s ELECT 10uF 20% 50V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V	C455 C481	1-124-477-11 s ELECT 47uF 20% 25V 1-130-728-00 s FILM 0.0022uF 1% 100V
C153 C154	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C482 C483 C484	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C155 C201 C204	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-126-233-11 s ELECT 22uF 20% 50V 1-163-986-00 s CERAMIC, CHIP 0.027uF 10% 25V	C485 C501	1-124-477-11 S ELECT 470F 20% 25V 1-124-907-11 S ELECT 100F 20% 50V
C205 C206	1-163-986-00 s CERAMIC, CHIP 0.027uF 10% 25V 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V	C502 C503 C504	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-986-00 s CERAMIC, CHIP 0.027uF 10% 25V 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
C208 C209 C210	1-163-986-00 s CERAMIC, CHIP 0.027uF 10% 25V 1-163-986-00 s CERAMIC, CHIP 0.027uF 10% 25V 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V	C505 C510	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C212 C213	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V	C511 C551 C552	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-126-101-11 s ELECT 100uF 20% 16V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
C221 C222 C251	1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V	C553 C554	1-124-907-11 s ELECT 10uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C252 C253	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C555 C556 C557	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
C257 C261 C267	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	C558 C559	1-130-477-00 s MYLAR 0.0033UF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
C271 C272 C273	1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C560 C561 C562 C563	1-124-907-11 s ELECT 10uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C273 C277 C281 C282	1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 259 1-164-232-11 S CERAMIC, CHIP 0.01uF 10% 100V 1-163-097-00 S CERAMIC, CHIP 15PF 5% 50V 1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V	C564 C565	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C283 C287	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-164-232-11 s CERAMIC 0.01uF 10% 100V	C583 C584 C585	1-163-279-11 S CERAMIC, CHIP 0.047UF 10% 25V 1-164-004-11 S CERAMIC, CHIP 0.1UF 10% 25V 1-130-477-00 S MYLAR 0.0033UF 5% 50V
2201			

(DR-118A	BOARD)	(DR-118A BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
C586 C587 C590 C591 C592	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-124-907-11 s ELECT 10uF 20% 50V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN315 1-506-468-11 s CONNECTOR 3P, MALE CN316 1-506-472-11 s CONNECTOR 7P, MALE CN317 1-506-467-11 s CONNECTOR 2P, MALE CN319 1-506-467-11 s CONNECTOR 2P, MALE CN319 1-506-467-11 s CONNECTOR 2P, MALE
C601 C602 C603 C604 C605	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN320 1-506-468-11 s CONNECTOR 3P, MALE CN321 1-562-708-11 o CONNECTOR, FPC 13P CN322 1-562-708-11 o CONNECTOR, FPC 13P CN323 1-506-468-11 s CONNECTOR 3P, MALE CN324 1-506-469-11 s CONNECTOR 4P, MALE
C610 C651 C652	1-126-101-11 s ELECT 100uF 20% 16V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V	CN325 1-506-469-11 s CONNECTOR 4P, MALE CN360 1-506-480-11 s CONNECTOR 15P, MALE
C653 C654	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CNI51 1-526-652-21 s SOCKET, IC 8P CNI52 1-526-652-21 s SOCKET, IC 8P CNI53 1-526-652-21 s SOCKET, IC 8P
C655 C656 C657 C901 C902	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-126-101-11 s ELECT 100uF 20% 16V 1-124-480-11 s ELECT 470uF 20% 25V	D101 8-710-200-02 g DIODE 10F2
C903 C904 C905 C906 C907	1-126-101-11 S ELECT 1000F 20% 16V 1-126-101-11 S ELECT 1000F 20% 16V 1-124-480-11 S ELECT 4700F 20% 25V 1-124-907-11 S ELECT 100F 20% 50V 1-124-907-11 S ELECT 100F 20% 50V	D122 8-719-200-02 s DIODE 10E2 D301 8-719-123-85 s DIODE 1SS304 D311 8-719-911-19 s DIODE 1SS119 D312 8-719-911-19 s DIODE 1SS119 D401 8-719-123-85 s DIODE 1SS304
C908 C909 C951 C952 C953	1-124-907-11 s ELECT 10uF 20% 50V 1-124-907-11 s ELECT 10uF 20% 50V 1-124-907-11 s ELECT 10uF 20% 50V 1-163-833-00 s CERAMIC, CHIP 0.068uF 25V 1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V 1-124-120-11 s ELECT 220uF 20% 25V	D402 8-719-123-85 s DIODE 1SS304
C954 C956 C957	1-124-120-11 s ELECT 220uF 20% 25V	D952 8-719-106-08 s DIODE RD6.2M-B2
C958 C959	1-163-023-00 s CERAMIC, CHIP 0.015uF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-903-11 s ELECT 1uF 20% 50V	F1
C960 C961	1-124-482-11 s ELECT 33uF 20% 35V 1-124-907-11 s ELECT 10uF 20% 50V	IC1 8-759-938-68 s IC CXD1095Q IC5 8-759-600-34 s IC M54532P
CN1A CN1B	1-506-468-11 s CONNECTOR 3P, MALE 1-506-468-11 s CONNECTOR 3P, MALE	IC6 8-759-645-23 s IC M54523P IC51 8-752-330-61 s IC CXK1013P IC52 8-752-330-61 s IC CXK1013P
CN3A CN3B CN5A	1-506-467-11 s CONNECTOR 2P, MALE 1-506-467-11 s CONNECTOR 2P, MALE 1-506-467-11 s CONNECTOR 2P, MALE	IC53 8-752-330-61 s IC CXK1013P IC54 8-759-946-00 s IC MB88341PFV IC101 8-759-205-56 s IC TA7267P
CN5B CN6A CN6B	1-506-467-11 s CONNECTOR 2P, MALE 1-506-467-11 s CONNECTOR 2P, MALE	IC101 8-759-205-56 s IC TA7267P IC111 8-759-205-56 s IC TA7267P IC112 8-759-205-56 s IC TA7267P
CN7A CN7B	1-506-467-11 s CONNECTOR 2P, MALE 1-506-467-11 s CONNECTOR 2P, MALE 1-506-467-11 s CONNECTOR 2P, MALE	IC151 8-759-908-17 s IC TL082CPS IC152 8-759-700-07 s IC NJM2903M IC201 8-759-908-17 s IC TL082CPS
CN8A CN8B CN9A	1-506-468-11 s CONNECTOR 3P, MALE 1-506-468-11 s CONNECTOR 3P, MALE 1-506-467-11 s CONNECTOR 2P, MALE	IC251 8-759-106-02 s IC UPC4570G2 IC252 8-759-700-07 s IC NJM2903M
CN9B CN300	1-506-467-11 s CONNECTOR 2P, MALE	IC253 8-759-106-02 s IC UPC4570G2 IC271 8-759-106-02 s IC UPC4570G2 IC272 8-759-700-07 s IC NJM2903M
CN302 CN305 CN306	1-573-601-11 o CONNECTOR 64P, MALE 1-506-473-11 s CONNECTOR 8P, MALE 1-506-474-11 s CONNECTOR 9P, MALE	1C273 8-759-106-02 s IC UPC4570G2 1C301 8-759-234-03 s IC TA8424F
CN307 CN309	1-506-477-11 s CONNECTOR 12P, MALE 1-506-469-11 s CONNECTOR 4P, MALE	IC302 8-759-908-17 s IC TL082CPS IC304 8-759-925-80 s IC SN74HC14NS IC305 8-759-700-07 s IC NJM2903M
CN314	1-506-470-11 s CONNECTOR 5P, MALE	IC401 8-743-914-00 s IC BX3914

(DR-118A	BOARD)	(DR-118A	BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
IC402	8-759-106-02 s IC UPC4570G2	R7	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
IC403	8-759-927-46 s IC SN74HC00NS	R8	
IC404	8-759-300-71 s IC HD14053BFP	R9	
IC405	8-759-300-71 s IC HD14053BFP	R10	
IC451	8-759-800-72 s IC LA7205	R11	
IC481	8-759-800-72 s IC LA7205	R12	1-216-089-00 s METAL, CHIP 47K 5% 1/10W
IC501	8-759-908-17 s IC TL082CPS	R13	1-216-073-00 s METAL, CHIP 10K 5% 1/10W
IC551	8-759-908-17 s IC TL082CPS	R14	1-216-089-00 s METAL, CHIP 47K 5% 1/10W
IC552	8-759-908-92 s IC TL084CNS	R15	1-216-073-00 s METAL, CHIP 47K 5% 1/10W
IC553	8-759-700-07 s IC NJM2903M	R16	1-216-089-00 s METAL, CHIP 47K 5% 1/10W
IC554	8-759-700-07 s IC NJM2903M	R17	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
IC601	8-759-908-17 s IC TL082CPS	R18	
IC602	8-759-008-67 s IC MC14066BF	R19	
IC651	8-759-908-17 s IC TL082CPS	R20	
IC652	8-759-008-67 s IC MC14066BF	R21	
IC901	8-759-982-13 s IC RC7812FA	R22	1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
IC951	8-759-929-26 s IC TL431CPS	R23	
IC952	8-759-100-94 s IC UPC358G2	R24	
IC953	8-759-700-07 s IC NJM2903M	R25	
IC954	8-759-100-94 s IC UPC358G2	R26	
L600	1-412-533-11 s INDUCTOR 47uH	R27	1-216-073-00 s METAL, CHIP 10K 5% 1/10W
L901	1-412-533-11 s INDUCTOR 47uH	R28	
L902	1-412-533-11 s INDUCTOR 47uH	R29	
L903	1-412-533-11 s INDUCTOR 47uH	R30	
L951	1-408-519-00 s COIL, CHOKE	R31	
Q101	8-729-807-50 s TRANSISTOR 2SD1623-R	R32	1-216-073-00 s METAL, CHIP 10K 5% 1/10W
Q102	8-729-101-07 s TRANSISTOR 2SB798	R33	
Q103	8-729-376-84 s TRANSISTOR 2SA768-G	R34	
Q201	8-729-807-50 s TRANSISTOR 2SD1623-R	R35	
Q202	8-729-101-07 s TRANSISTOR 2SB798	R36	
Q203	8-729-102-47 s TRANSISTOR 2SA1141-Q	R37	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-295-00 s METAL, CHIP 0 1-216-045-00 s METAL, CHIP 680 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
Q204	8-729-102-57 s TRANSISTOR 2SC3012	R38	
Q205	8-729-159-65 s TRANSISTOR 2SD596-DV5	R42	
Q206	8-729-162-45 s TRANSISTOR 2SB624-T1BV5	R46	
Q207	8-729-102-47 s TRANSISTOR 2SA1141-Q	R51	
Q208	8-729-102-57 s TRANSISTOR 2SC3012	R52	1-216-089-00 s METAL, CHIP 47K 5% 1/10W
Q209	8-729-159-65 s TRANSISTOR 2SD596-DV5	R53	
Q210	8-729-162-45 s TRANSISTOR 2SB624-T1BV5	R54	
Q211	8-729-102-47 s TRANSISTOR 2SA1141-Q	R55	
Q212	8-729-102-57 s TRANSISTOR 2SC3012	R56	
Q401 Q402 Q404 Q501 Q502	8-729-905-18 s TRANSISTOR DTC144EU 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-905-18 s TRANSISTOR DTC144EU 8-729-159-65 s TRANSISTOR 2SD596-DV5 8-729-141-83 s TRANSISTOR 2SA473-Y	R103 Z R104 Z	1-216-105-00 s METAL, CHIP 220K 5% 1/10W 1-215-863-11 s METAL 100 5% 1W 1-215-868-00 s METAL 680 5% 1W 1-215-867-00 s METAL 470 5% 1W 1-216-385-11 s METAL 0.47 5% 3W
Q503	8-729-101-07 s TRANSISTOR 2SB798	R106	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-383-11 s METAL 0.33 5% 3W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
Q504	8-729-807-50 s TRANSISTOR 2SD1623-R	R107	
Q505	8-729-376-84 s TRANSISTOR 2SA768-G	R108	
Q551	8-729-209-07 s TRANSISTOR 2SC4213-B	R111	
Q951	8-729-117-32 s TRANSISTOR 2SC4177	R112	
Q952 Q953 Q954	8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-142-68 s TRANSISTOR 2SJ143 8-729-101-07 s TRANSISTOR 2SB798	R121 R122 R123	↑1-216-383-11 s METAL 0.33 5% 3W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W ↑1-216-383-11 s METAL 0.33 5% 3W
R2	8-729-101-07 s TRANSISTOR 25B798  1-216-295-00 s METAL, CHIP 0  1-216-097-00 s METAL, CHIP 100K 5% 1/10W  1-216-295-00 s METAL, CHIP 0  1-216-073-00 s METAL, CHIP 10K 5% 1/10W  1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R151	1-216-033-00 s METAL, CHIP 220 5% 1/10W
R3		R152	1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R4		R153	1-216-041-00 s METAL, CHIP 470 5% 1/10W
R5		R154	1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R6		R155	1-216-073-00 s METAL, CHIP 10K 5% 1/10W

NOTE:For the # marked in the following parts list, refer to Section 19 " CHANGED PARTS ".

1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-109-00 s METAL, CHIP 330K 5% 1/10W 1-216-109-00 s METAL, CHIP 330K 5% 1/10W 1-217-666-31 s RES 0

R654

R656 R657 R902

DT-29AP	BOARD	(DT-29AP	BOARD)
Ref. No or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
1pc 1pc	A-8271-469-A o MOUNTED CIRCUIT BOARD, DT-29AP 3-172-469-01 o CASE (A), DT SHIELD	L8	1-412-533-11 s INDUCTOR 47uH
1pc 1pc 2pcs	3-172-470-01 o CASE (B), DT SHIELD 3-703-044-26 o LABEL, CAUTION 1-533-217-31 s HOLDER, FUSE	Q1 Q2 Q3	8-729-101-68 s TRANSISTOR 2SC2654 8-729-101-68 s TRANSISTOR 2SC2654 8-729-105-97 s TRANSISTOR 2SA1156-2K
2pcs	3-703-044-26 o LABEL, CAUTION 1-533-217-31 s HOLDER, FUSE 4-812-134-11 s RIVET NYLON, 3.5	Q4 Q5	8-729-141-78 s TRANSISTOR 2SC3632-K 8-729-141-78 s TRANSISTOR 2SC3632-K
C1 C2 C3	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-126-103-11 s ELECT 470uF 20% 16V 1-126-103-11 s ELECT 470uF 20% 16V	କ୍6 କ୍7 କ୍8	8-729-209-07 s TRANSISTOR 2SC4213-B 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-118-43 s TRANSISTOR 2SA1413-L
C4 C5	1-126-103-11 s ELECT 470uF 20% 16V 1-126-103-11 s ELECT 470uF 20% 16V	-	8-729-105-97 s TRANSISTOR 2SA1156-2K 8-729-141-78 s TRANSISTOR 2SC3632-K
C6 C8	1-126-103-11 s ELECT 470uF 20% 16V 1-124-903-11 s ELECT 1uF 20% 50V	Q11 Q12	8-729-141-78 s TRANSISTOR 2SC3632-K 8-729-209-07 s TRANSISTOR 2SC4213-B
C15 C16 C17	1-126-103-11 s ELECT 470uF 20% 16V 1-124-903-11 s ELECT 1uF 20% 50V 1-130-491-00 s MYLAR 0.047uF 5% 50V 1-130-491-00 s MYLAR 0.047uF 5% 50V 1-163-017-00 s CERAMIC, CHIP 0.0047uF 5% 50V	Q13 Q14 Q15	8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-118-43 s TRANSISTOR 2SA1413-L 8-729-106-67 s TRANSISTOR 2SD1615A-T1GQGP
C18 C19	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-124-667-11 s ELECT 10uF 20% 100V		1-216-311-00 s METAL, CHIP 6.8 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
C20 C21 C22			1-216-311-00 s METAL, CHIP 6.8 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
C23 C24	1-163-017-00 s CERAMIC, CHIP 0.0047uF 5% 50V 1-163-017-00 s CERAMIC, CHIP 0.0047uF 5% 50V	R6 R7	1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
C31 C32 C33	1-163-017-00 S CERAMIC, CHIP 0.0047uF 5% 50V 1-163-017-00 S CERAMIC, CHIP 0.0047uF 5% 50V 1-163-017-00 S CERAMIC, CHIP 0.0047uF 5% 50V 1-126-101-11 S ELECT 100uF 20% 16V 1-126-101-11 S ELECT 100uF 20% 16V 1-124-667-11 S ELECT 10uF 20% 100V	R8 R9 R10	1-214-929-00 s METAL 470K 1% 1/2W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
C34	1-124-667-11 s ELECT 10uF 20% 100V	R11 R12	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-214-924-00 s METAL 300K 1% 1/2W
CN390 CN391	1-124-667-11 s ELECT 10uF 20% 100V 1-506-476-11 s CONNECTOR 11P, MALE 1-506-473-11 s CONNECTOR 8P, MALE	R13 R14 R15	1-216-081-00 S METAL, CHIP 22K 5% 1/10W 1-260-124-11 S CARBON 120K 5% 1/2W 1-260-124-11 S CARBON 120K 5% 1/2W
D1 D2 D3	8-719-815-85 s DIODE 1S1585 8-719-300-33 s DIODE RU-3AM 8-719-300-33 s DIODE RU-3AM	R16	1-216-013-00 s METAL, CHIP 33 5% 1/10W 1-216-013-00 s METAL, CHIP 33 5% 1/10W
D4 D5	8-719-815-85 s DIODE 1S1585 8-719-300-33 s DIODE RU-3AM 8-719-300-33 s DIODE RU-3AM 8-719-300-33 s DIODE RU-3AM 8-719-300-33 s DIODE RU-3AM	R18 R19 R20	1-260-102-11 s CARBON 1.8K 5% 1/2W 1-215-493-00 s METAL 1M 1% 1/6W 1-215-493-00 s METAL 1M 1% 1/6W
D6 D7	8-719-123-85 s DIODE 1SS304 8-719-941-23 s DIODE DA204U	R21	1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W
D8 D9 D11	8-719-941-23 s DIODE DA204U 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1	R22 R23 R24	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
D12 D13	8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U	R27 R28	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-260-124-11 s CARBON 120K 5% 1/2W
F1	<b>11-532-078-00 s FUSE 1A 250V 14 250V</b>	R29 R30 R31	1-260-124-11 s CARBON 120K 5% 1/2W 1-216-013-00 s METAL, CHIP 33 5% 1/10W 1-215-493-00 s METAL 1M 1% 1/6W
IC1 IC2 IC3	8-759-908-17 s IC TL082CPS 8-759-908-17 s IC TL082CPS 8-759-908-17 s IC TL082CPS	R32 R33	1-215-493-00 s METAL 1M 1% 1/6W 1-260-102-11 s CARBON 1.8K 5% 1/2W
IC4 IC5	8-759-908-17 s IC TL082CPS 8-759-981-65 s IC LM2903M	R34 R35 R36	1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W
IC6	8-759-929-26 s IC TL431CPS	R37	1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
L1 L2 L3	1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-410-093-11 s INDUCTOR 33mH	R38 R39 R40	1-214-929-00 s METAL 470K 1% 1/2W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
L4 L5	1-410-093-11 s INDUCTOR 33mH 1-410-093-11 s INDUCTOR 33mH	R41 R42	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
L6 L7	1-410-093-11 s INDUCTOR 33mH 1-412-533-11 s INDUCTOR 47uH	R43 R44	1-214-924-00 s METAL 300K 1% 1/2W 1-216-013-00 s METAL, CHIP 33 5% 1/10W

# (DT-29AP BOARD)

Ref. No. or Q'ty	Part No.	SP	Description	
R45 R46 R47 R48 R49	1-216-073-00 1-216-121-00	S S	METAL, CHIE METAL, CHIE METAL, CHIE	2 1M 5% 1/10W 2 270K 5% 1/10W 2 10K 5% 1/10W 3 1M 5% 1/10W 2 270K 5% 1/10W
R50 R52 R53 R54	1-216-694-11	S	METAL, CHIE	P 10K 5% 1/10W P 62K 0.5% 1/10W P 30K 0.5% 1/10W P 1K 5% 1/10W
<b>T</b> 1	1-448-937-11	S	TRANSFORMER	, CONVERTER

# DT-30 BOARD

D1-30 BOARD				
Ref. No. or Q'ty	Part No. SP Description			
1pc 1pc 1pc 2pcs	A-8271-183-A O MOUNTED CIRCUIT BOARD, DT-30 3-171-455-01 O PLATE (S), SHIELD, CARD 3-171-456-02 O SHEET (S), CARD 7-621-759-45 S SCREW +PSW 2.6X6 2-251-622-11 S LEVER, PC BOARD			
C4 C5	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-124-477-11 s ELECT 47uF 20% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C6	1-124-477-11 s ELECT 47uF 20% 25V			
C7	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C8	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C9	1-124-477-11 s ELECT 47uF 20% 25V			
C11	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V			
C13 C14 C15 C16	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-019-00 s CERAMIC, CHIP 0.0068uF 10% 50V 1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V 1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V 1-126-101-11 s ELECT 100uF 20% 16V			
C17	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C18	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C19	1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V			
C20	1-124-034-51 s ELECT 33uF 20% 16V			
C21	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C22	1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V			
C23	1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V			
C24	1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V			
C25	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C27	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C28	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C29	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C30	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C33	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C34	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C35	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C36	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C37	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C51	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C52	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C54	1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V			
C101	1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V			
C102	1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V			
C103	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C107	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C108	1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V			
C109	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C201	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V			
C202	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C203	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C204 C205 C206 C207 C208	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-016-00 s CERAMIC, CHIP 0.0039uF 10% 50V 1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V 1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V 1-163-016-00 s CERAMIC, CHIP 0.0039uF 10% 50V			
C209	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C210	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V			
C211	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			
C212	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V			

(DT-30 B	DARD)	(DT-30 B	OARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
C213 C214 C215 C216 C218	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-017-00 s CERAMIC, CHIP 0.0047uF 5% 50V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	C327 C328 C329 C330	1-163-135-00 s CERAMIC, CHIP 560PF 5% 50V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-229-11 s CERAMIC, CHIP 12PF 5% 50V 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V
C219	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	CN1 CN113	1-506-484-11 s CONNECTOR 5P, MALE 1-573-600-21 s CONNECTOR, PHEC 100P, MALE
C220 C221 C222	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	CNI10	1-526-659-00 o SOCKET, IC 28P
C223 C224 C225 C226 C227	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	D3 D4 D5 D6 D7	8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U
C228	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	D8 D9 D10	8-719-941-23 S DIODE DA204U 8-719-941-23 S DIODE DA204U
C229 C230 C231	1-163-016-00 s CERAMIC, CHIP 0.0039uF 10% 50V 1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V 1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V 1-163-016-00 s CERAMIC, CHIP 0.0039uF 10% 50V	D10 D11 D201	8-719-800-60 s LED TLR214, RED 8-719-123-82 s DIODE 1SS303-T1 8-719-938-72 s DIODE SB01-05CP
C232 C233 C234 C235	1-163-016-00 S CERAMIC, CHIP 0.00390F 10% 50V 1-164-232-11 S CERAMIC 0.01uF 10% 100V 1-164-004-11 S CERAMIC, CHIP 0.1uF 10% 25V 1-164-232-11 S CERAMIC, CHIP 0.01uF 10% 100V	D202 D203 D204 D301	8-719-938-72 s DIODE SB01-05CP 8-719-941-23 s DIODE DA204U 8-719-941-23 s DIODE DA204U 8-719-938-72 s DIODE SB01-05CP
C236 C237 C238	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	IC1 IC2	8-759-154-71 s IC CXD8176Q 8-759-054-54 s IC SRM2016M10
C239 C240 C241	1-163-017-00 s CERAMIC, CHIP 0.0047uF 5% 50V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	IC5 IC8 IC10	8-759-323-88 s IC HD6433328RAOOF 8-759-925-74 s IC TC74HC04NS 8-759-075-38 s IC C256-PW2650DT-V100, EPROM
C242 C243	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	IC20 IC21 IC27	8-759-938-68 s IC CXD1095Q 8-759-926-11 s IC SN74HC138NS 8-759-925-76 s IC SN74HC08NS
C244 C245	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	IC29 IC30	8-759-925-85 s IC SN74HC32NS 8-759-982-21 s IC RC78L05A
C246 C247 C248	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	IC101 IC103	8-752-343-05 s IC CXD2202Q 8-759-925-90 s IC SN74HC74NS
C249 C250	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V	IC201 IC202 #IC203	8-759-908-92 s IC TL084CNS 8-759-908-92 s IC TL084CNS 8-759-700-07 s IC NJM2903M
C251 C252 C301	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	IC204 IC205	8-759-908-17 s IC TL082CPS 8-759-300-71 s IC HD14053BFP
C306 C307	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V	IC206 IC207 IC208	8-759-908-92 s IC TL084CNS 8-759-908-92 s IC TL084CNS 8-759-908-17 s IC TL082CPS
C308 C309 C311	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-124-477-11 s ELECT 47uF 20% 25V	IC209 IC210	8-759-300-71 s IC HD14053BFP 8-759-300-71 s IC HD14053BFP
C312 C313	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V	IC302 IC305 IC307	8-759-155-00 s IC CXD8177Q 8-752-006-00 s IC CX20060 8-759-324-11 s IC HA12411
C314 C315 C316	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-108-00 s CERAMIC, CHIP 43PF 5% 50V	IC308 IC309	8-759-982-25 s IC RC78L09A 8-759-201-47 s IC TA7357AP
C317 C318 C319 C320 C321	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V 1-124-477-11 s ELECT 47uF 20% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V	L1 L2 L3 L4 L301	1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH
C322	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V	L302	1-408-413-00 s INDUCTOR 22uH
C323 C325 C326	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V	L303 L304 L305	1-410-468-11 s INDUCTOR 6.8uH 1-408-429-00 s INDUCTOR 470uH 1-412-533-11 s INDUCTOR 47uH

R212

NOTE:For the # marked in the following parts list, refer to Section 19 " CHANGED PARTS ".

1--216--079--00 s METAL, CHIP 18K 5% 1/10W 1-216-688-11 s METAL, CHIP 36K 0.5% 1/10W 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W

R272 R273 R274 R275

R276 R277 R278 R279

#### EQ-42 BOARD

Ref. No. or Q'ty Part No. SP Description

All of component parts on the EQ-42 board are supplied together when you order SS-48P board.

1-163-135-00 s CERAMIC, CHIP 560PF 5% 50V 1-163-989-11 s CERAMIC, CHIP 0.033UF 10% 25V C459 C460

IC415 8-759-908-17 s IC TL082CPS

Q403 8-729-209-07 s TRANSISTOR 2SC4213-B

 $1\mbox{-}216\mbox{-}049\mbox{-}00$  s METAL, CHIP 1K 5% 1/10W 1-216\mbox{-}121\mbox{-}00 s METAL, CHIP 1M 5% 1/10W 1-216\mbox{-}073\mbox{-}00 s METAL, CHIP 10K 5% 1/10W R439 R440 R449

HC-14C BOARD

Ref. No.

or Q'ty Part No. SP Description A-6717-635-A o MOUNTED CIRCUIT BOARD, HC-14C 1pc 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-229-00 s ELECT 33uF 20% 10V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C2 C3

C4 C5

1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C6 C7 C8 C9

C11 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V

1-566-766-11 o CONNECTOR 11P, MALE 1-566-760-11 s CONNECTOR, ZR 5P, MALE 1-565-772-11 o CONNECTOR, PS 10P, MALE 1-566-765-11 o CONNECTOR 10P, MALE 1-566-762-11 o CONNECTOR 7P, MALE CN550 CN551 CN552 CN553 CN554

CN555 1-566-761-11 o CONNECTOR 6P, MALE

CP1 1-548-152-11 o HOURS METER, DIGITAL

D1 8-719-939-39 s LED GL5HD8, RED

↑1-532-776-21 s FUSE 1A 125V ↑1-532-776-21 s FUSE 1A 125V F1 F2

8-759-043-36 s IC MC68HC05N4-SC406673 8-759-926-64 s IC SN74HC367ANS 8-759-300-71 s IC HD14053BFP IC2

8-729-924-56 s TRANSISTOR DTC123JU 8-729-924-56 s TRANSISTOR DTC123JU Q1 Q2 Q3 Q4 Q5 8-729-924-56 s TRANSISTOR DTC123JU 8-729-924-56 s TRANSISTOR DTC123JU 8-729-924-56 s TRANSISTOR DTC123JU

1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W R2 R3

R5 R6

1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W **R7** R8 R9

1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-037-00 s METAL, CHIP 330 5% 1/10W R11 R12 R13 R14

R16 R17

1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W R18 R19 R20

1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W R22 R23 R24

NOTE: For the # marked in the following parts list, refer to Section 19 " CHANGED PARTS ".

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(HC-14C BOARD)
Ref. No.
or Q'ty Part No.
                                                  SP Description
                     1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R26
R27
R28
R29
R30
                    1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R33
R34
R35
R38
R41
                    1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-295-00 s METAL, CHIP 0
R44
R45
R48
R51
R100
                    1-216-295-00 s METAL, CHIP 0
R101
R102
R103
R104
R105
                      1-216-295-00 s METAL, CHIP 0
                     1-216-295-00 s METAL, CHIP 0 1-216-295-00 s METAL, CHIP 0
R106
R108
                     1-216-295-00 s METAL, CHIP 0
1-216-295-00 s METAL, CHIP 0
R109
R110
                      1-216-295-00 s METAL, CHIP 0
R111
                     1-216-295-00 s METAL, CHIP 0
R112
                     1-216-295-00 s METAL, CHIP 0
R113
R114
R115
R116
                     1-216-295-00 s METAL, CHIP 0
R118
R119
R120
R121
R122
                    1-216-295-00 s METAL, CHIP 0
R124
R125
R126
R127
                      1-216-295-00 s METAL, CHIP 0
R128
                     1-216-295-00 s METAL, CHIP 0
1-216-295-00 s METAL, CHIP 0
1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R129
R130
R131
                     1-237-695-11 s RES, VAR CARBON 5K
1-237-695-11 s RES, VAR CARBON 5K
1-237-695-11 s RES, VAR CARBON 5K
1-237-696-11 s RES, VAR CARBON 5K
1-237-696-11 s RES, VAR CARBON 5K
RV1
RV3
RV4
RV5
RV6
RV7
                     1-237-696-11 s RES, VAR CARBON 5K
                      1-572-839-11 s SWITCH, SLIDE
                     1-572-837-11 s SWITCH, SLIDE
1-554-909-11 s SWITCH, PUSH
1-554-909-11 s SWITCH, PUSH
1-572-837-11 s SWITCH, SLIDE
S2
S7
S8
S9
                      1-572-838-11 s SWITCH, SLIDE
                     1-572-837-11 s SWITCH, SLIDE
1-572-837-11 s SWITCH, SLIDE
1-572-837-11 s SWITCH, SLIDE
S11
S13
S14
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(HC-14C BOARD) Ref. No. or Q'ty Part No. SP Description 1-572-837-11 s SWITCH, SLIDE S15 1-554-949-11 s SWITCH, SLIDE S16 X1 1-567-192-11 s RESONATOR, CERAMIC 4.00MHz

KY-210B BOARD		(KY-210B	BOARD)
Ref. No. or Q'ty Part No. SP Descrip	tion	Ref. No. or Q'ty	Part No. SP Description
This board includes the DP-139B	board.	D29 D30	8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835
1pc A-8271-182-A O MOUNTED 3pcs 3-660-828-00 O HOLDER 16pcs 3-668-124-00 O HOLDER,	CIRCUIT BOARD, KY-210B (9), PC BOARD LED	D36 D38 D39	8-719-939-39 S LED GL5HD8, RED 8-719-939-39 S LED GL5HD8, RED 8-719-939-39 S LED GL5HD8, RED
C1 1-124-907-11 S ELECT 1 C2 1-124-907-11 S ELECT 1 C6 1-126-101-11 S ELECT 1 C7 1-163-037-11 S CERAMIC C8 1-163-037-11 S CERAMIC	011F 20% 50V	D40 D41 D42 D43 D49	8-719-939-39 s LED GL5HD8, RED 8-719-939-39 s LED GL5HD8, RED 8-719-939-39 s LED GL5HD8, RED 8-719-939-39 s LED GL5HD8, RED 8-719-802-11 s LED TLUG154, GRN
C9 1-124-907-11 S ELECT 1 C10 1-163-037-11 S CERAMIC C12 1-163-037-11 S CERAMIC C13 1-124-907-11 S ELECT 1 C14 1-163-243-11 S CERAMIC	OUF 20% 50V CHIP 0.022UF 10% 25V CHIP 0.022UF 10% 25V OUF 20% 50V CHIP 47PF 5% 50V	D51 D55 D56 D57 D58	8-719-939-39 s LED GL5HD8, RED 8-719-939-39 s LED GL5HD8, RED 8-719-939-39 s LED GL5HD8, RED 8-719-802-11 s LED TLUG154, GRN 8-719-939-39 s LED GL5HD8, RED
C16 1-163-104-00 S CERAMIC C17 1-163-104-00 S CERAMIC C20 1-124-907-11 S ELECT 1 C21 1-124-907-11 S ELECT 1	.Ouf 20% 50V .Ouf 20% 50V	D59 D60 D63	8-719-802-11 s LED TLUG154, GRN 8-719-939-39 s LED GL5HD8, RED 8-719-939-39 s LED GL5HD8, RED
C22 1-124-907-11 S ELECT 1  C23 1-124-907-11 S ELECT 1  C24 1-124-907-11 S ELECT 1  C25 1-124-907-11 S ELECT 1	.0uF 20% 50V .0uF 20% 50V .0uF 20% 50V .0uF 20% 50V	IC2 IC3 IC4 IC5 IC6	8-759-982-21 s IC RC78L05A 8-759-500-43 s IC CXD8117P 8-759-501-52 s IC M50747H-250SP 8-759-645-16 s IC M54516P 8-759-645-16 s IC M54516P
C26 1-124-907-11 s ELECT 1 C27 1-124-907-11 s ELECT 1	LOUF 20% 50V LOUF 20% 50V	IC7 IC8	8-759-645-16 s IC M54516P 8-759-982-21 s IC RC78L05A
C30 1-163-257-11 S CERAMIC C31 1-163-257-11 S CERAMIC C32 1-163-257-11 S CERAMIC C33 1-163-257-11 S CERAMIC C35 1-124-907-11 S ELECT 1	C, CHIP 180PF 5% 50V C, CHIP 180PF 5% 50V C, CHIP 180PF 5% 50V	Q2 Q3 Q4 Q5 Q6	8-729-100-66 s TRANSISTOR 2SC1623 8-729-901-01 s TRANSISTOR DTC144EK 8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162
C47 1-124-907-11 S ELECT 1 C48 1-124-477-11 S ELECT 4 C49 1-124-907-11 S ELECT 1	17uF 20% 25V		8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162
CN2 1-506-485-11 s CONNECT CN590 1-559-261-21 s CABLE, CN1003 1-535-761-11 o CABLE,	TLAI IUF	AT.	8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162
D1 8-719-104-34 s DIODE 1 D2 8-719-104-34 s DIODE 1 D4 8-719-109-57 s DIODE R D5 8-719-109-57 s DIODE R D6 8-719-109-57 s DIODE R	LS2835 RD2.4ES-B2 RD2.4ES-B2	Q13 Q14 Q15 Q16 Q17	8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162
D7 8-719-109-57 S DIODE R D8 8-719-109-57 S DIODE R D9 8-719-109-57 S DIODE R D10 8-719-109-57 S DIODE R D11 8-719-104-34 S DIODE R	RD2.4ES-B2 RD2.4ES-B2 RD2.4ES-B2 RD2.4ES-B2	Q18 Q19 Q20 Q21 Q22	8-729-216-22 s TRANSISTOR 2SA1162 8-729-216-22 s TRANSISTOR 2SA1162 8-729-923-62 s TRANSISTOR DTA123JK-T146 8-729-923-62 s TRANSISTOR DTA123JK-T146 8-729-923-62 s TRANSISTOR DTA123JK-T146
D12 8-719-104-34 s DIODE 1 D13 8-719-104-34 s DIODE 1 D14 8-719-104-34 s DIODE 1 D16 8-719-104-34 s DIODE 1 D19 8-719-104-34 s DIODE 1	LS2835 LS2835 LS2835 LS2835 LS2835	Q23 Q24 Q25 Q26 Q27	8-729-923-62 s TRANSISTOR DTA123JK-T146 8-729-923-62 s TRANSISTOR DTA123JK-T146 8-729-922-73 s TRANSISTOR DTC123JK-T146 8-729-922-73 s TRANSISTOR DTC123JK-T146 8-729-922-73 s TRANSISTOR DTC123JK-T146
D20 8-719-104-34 s DIODE 1 D21 8-719-104-34 s DIODE 1 D23 8-719-104-34 s DIODE 1 D24 8-719-104-34 s DIODE 1 D25 8-719-104-34 s DIODE 1	1S2835 1S2835 1S2835 1S2835 1S2835	Q28 Q29 Q30 Q31 Q32	8-729-922-73 s TRANSISTOR DTC123JK-T146 8-729-922-73 s TRANSISTOR DTC123JK-T146 8-729-922-73 s TRANSISTOR DTC123JK-T146 8-729-922-73 s TRANSISTOR DTC123JK-T146 8-729-922-73 s TRANSISTOR DTC123JK-T146
D26 8-719-104-34 s DIODE 1 D27 8-719-104-34 s DIODE 1	1\$2835	Q33 Q34 Q35	8-729-900-51 s TRANSISTOR DTA114TK 8-729-100-66 s TRANSISTOR 2SC1623 8-729-900-51 s TRANSISTOR DTA114TK

(KY-210B	BOARD)	(MY-210B BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
Q36 Q37 Q38 Q39 Q40	Part No. SP Description  8-729-100-66 s TRANSISTOR 2SC1623  8-729-900-51 s TRANSISTOR DTA114TK  8-729-100-66 s TRANSISTOR 2SC1623  8-729-900-51 s TRANSISTOR DTA114TK  8-729-100-66 s TRANSISTOR 2SC1623	R47 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R48 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R49 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R50 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R51 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
Q41 Q42 Q43 Q44 Q45	8-729-900-51 s TRANSISTOR DTA114TK 8-729-100-66 s TRANSISTOR 2SC1623 8-729-900-51 s TRANSISTOR DTA114TK 8-729-100-66 s TRANSISTOR 2SC1623 8-729-900-51 s TRANSISTOR DTA114TK	R52 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R53 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R54 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R55 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R56 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
Q46 Q47 Q48 Q53 Q54	8-729-100-66 s TRANSISTOR 2SC1623 8-729-900-51 s TRANSISTOR DTA114TK 8-729-100-66 s TRANSISTOR 2SC1623 8-729-900-51 s TRANSISTOR DTA114TK 8-729-100-66 s TRANSISTOR 2SC1623	R57 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R58 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R59 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R60 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R67 1-216-027-00 s METAL, CHIP 120 5% 1/10W
Q63 Q64 Q87 Q88	8-729-900-51 s TRANSISTOR DTA114TK 8-729-100-66 s TRANSISTOR 2SC1623 8-729-100-66 s TRANSISTOR 2SC1623 8-729-100-66 s TRANSISTOR 2SC1623	R68 1-216-027-00 s METAL, CHIP 120 5% 1/10W R69 1-216-027-00 s METAL, CHIP 120 5% 1/10W R70 1-216-027-00 s METAL, CHIP 120 5% 1/10W R71 1-216-027-00 s METAL, CHIP 120 5% 1/10W R72 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R5 R6 R7 R8 R9	1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	R73 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R74 1-216-027-00 s METAL, CHIP 120 5% 1/10W R75 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R76 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R77 1-216-027-00 s METAL, CHIP 120 5% 1/10W
R10 R11 R12 R13 R14	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	
R15 R16 R17 R18 R19	1-216-085-00 s METAL, CHIP 33K 5% 1/10W 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	R83 1-216-027-00 s METAL, CHIP 120 5% 1/10W R84 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R85 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R86 1-216-027-00 s METAL, CHIP 120 5% 1/10W R87 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R20 R21 R22 R23 R24	1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	R88 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R89 1-216-027-00 s METAL, CHIP 120 5% 1/10W R90 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R91 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R92 1-249-410-11 s CARBON 270 5% 1/4W
R25 R28 R29 R30 R31	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-249-407-11 s CARBON 150 5% 1/4W 1-249-407-11 s CARBON 150 5% 1/4W	R93 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R94 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R95 1-216-027-00 s METAL, CHIP 120 5% 1/10W R103 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R104 1-216-043-00 s METAL, CHIP 560 5% 1/10W
R32 R33 R34 R35 R36	1-249-407-11 s CARBON 150 5% 1/4W 1-249-407-11 s CARBON 150 5% 1/4W	R106 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R107 1-216-043-00 s METAL, CHIP 560 5% 1/10W R109 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R110 1-216-043-00 s METAL, CHIP 560 5% 1/10W R112 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R37 R38 R39 R40 R41	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	R113 1-216-043-00 s METAL, CHIP 560 5% 1/10W R115 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R116 1-216-043-00 s METAL, CHIP 560 5% 1/10W R117 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R42 R43 R44 R45 R46	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W	R119 1-216-027-00 s METAL, CHIP 120 5% 1/10W R120 1-216-027-00 s METAL, CHIP 120 5% 1/10W R121 1-216-049-00 s METAL, CHIP 1K 5% 1/10W

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(KY-210B BOARD)
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Ref. No. or Q'ty	Part No. SP Description
R124	1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R125	1-216-043-00 s METAL, CHIP 560 5% 1/10W
R126	1-216-027-00 s METAL, CHIP 120 5% 1/10W
R127	1-216-027-00 s METAL, CHIP 120 5% 1/10W
R128	1-216-027-00 s METAL, CHIP 120 5% 1/10W
R132 R135 R138 R141 R144	1-216-027-00 s METAL, CHIP 120 5% 1/10W
R145 R146 R147 R148 R159	1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-027-00 s METAL, CHIP 120 5% 1/10W 1-216-027-00 s METAL, CHIP 120 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R160 R161 R162 R163 R170	1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R171 R172 R173	1-216-049-00 s METAL, CHIP 1K 5% 1/10W
\$1	1-571-169-11 s SWITCH, PUSH, WITH LED
\$2	1-571-169-21 s SWITCH, PUSH, WITH LED
\$3	1-571-167-41 s SWITCH, PUSH, WITH LED
\$4	1-571-167-31 s SWITCH, PUSH, WITH LED
\$5	1-571-167-21 s SWITCH, PUSH, WITH LED
\$6	1-571-167-11 s SWITCH, PUSH, WITH LED
\$7	1-571-167-11 s SWITCH, PUSH, WITH LED
\$10	1-552-539-00 s SWITCH, PUSH
\$16	1-571-167-11 s SWITCH, PUSH, WITH LED
\$17	1-552-539-00 s SWITCH, PUSH
S19	1-552-539-00 s SWITCH, PUSH
S20	1-552-539-00 s SWITCH, PUSH
S21	1-552-539-00 s SWITCH, PUSH
S24	1-516-995-00 s SWITCH, LEYER SLIDE
S25	1-552-539-00 s SWITCH, PUSH
S26	1-552-539-00 s SWITCH, PUSH
S27	1-552-539-00 s SWITCH, PUSH
S28	1-552-539-00 s SWITCH, PUSH
S29	1-552-539-00 s SWITCH, PUSH
S30	1-552-539-00 s SWITCH, PUSH
S31	1-571-167-11 s SWITCH, PUSH, WITH LED
S34	1-552-539-00 s SWITCH, PUSH
S35	1-552-539-00 s SWITCH, PUSH
<b>X1</b>	1-567-869-11 s RESONATOR, CERAMIC 9.83MHz

# LP-57 BOARD

Ref. No. or Q'ty	Part No. SP Description
1pc	3-171-508-02 o HOLDER, LAMP
CN932	1-506-467-11 s CONNECTOR 2P, MALE
D1 D2 D3 D4 D5	8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL
D6 D7 D8 D9 D10	8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL
R1 R2 R3 R4 R5	1-249-409-11 s CARBON 220 5% 1/4W

MA-44B BOARD		(MA-44B B	SOARD)			
Ref. No. or Q'ty Part No. SP Description	n	Ref. No. or Q'ty	Part No.	SP Descript	ion	
1pc A-8271-181-A o MOUNTED CIR		Q5	8-729-143-6	2 s TRANSIST 3 s TRANSIST	OR 2SJ132	
C1 1-163-037-11 s CERAMIC, CF C2 1-163-037-11 s CERAMIC, CF C3 1-163-037-11 s CERAMIC, CF C4 1-163-037-11 s CERAMIC, CF	HIP 0.022uF 10% 25V HIP 0.022uF 10% 25V HIP 0.022uF 10% 25V	Q7 Q8	8-729-143-6 8-729-143-6	3 s TRANSIST 3 s TRANSIST 3 s TRANSIST	OR 2SJ132 OR 2SJ132	
C5 1-163-037-11 s CERAMIC, CF C6 1-163-037-11 s CERAMIC, CF				3 s TRANSIST 3 s TRANSIST		
C7 1-163-037-11 S CERAMIC, CF C8 1-163-037-11 S CERAMIC, CF C9 1-163-037-11 S CERAMIC, CF C10 1-163-037-11 S CERAMIC, CF C10 1-163-037-11 S CERAMIC, CF	HIP 0.022uF 10% 25V HIP 0.022uF 10% 25V HIP 0.022uF 10% 25V	R1 R2 R3 R4 R5	1-216-089-0 1-216-089-0 1-216-089-0 1-216-089-0 1-216-089-0	O S METAL, CO	HIP 47K 5% HIP 47K 5% HIP 47K 5% HIP 47K 5%	1/10W 1/10W 1/10W 1/10W 1/10W
C11 1-163-275-11 s CERAMIC, CI C12 1-163-275-11 s CERAMIC, CI C13 1-163-809-11 s CERAMIC, CI C14 1-163-809-11 s CERAMIC, CI C15 1-124-477-11 s ELECT 47uF	HIP 0.001uF 5% 50V HIP 0.047uF 10% 25V HIP 0.047uF 10% 25V	R6 R7 R8 R9	1-216-089-0 1-216-081-0 1-216-081-0 1-216-081-0	O S METAL, CO	HIP 47K 5% HIP 22K 5% HIP 22K 5% HIP 22K 5%	1/10W 1/10W 1/10W 1/10W
C16 1-124-477-11 S ELECT 47uF C17 1-124-927-11 S ELECT 4.7uI C18 1-124-927-11 S ELECT 4.7uI C19 1-163-097-00 S CERAMIC, CI C20 1-163-097-00 S CERAMIC, CI	F 20% 100V F 20% 100V HIP 15PF 5% 50V	R11 R12 R13 R14	1-216-107-0 1-216-107-0 1-216-107-0 1-216-107-0	O S METAL, CO	HIP 270K 5% HIP 270K 5% HIP 270K 5% HIP 270K 5%	1/10W 1/10W 1/10W 1/10W
C21 1-163-097-00 s CERAMIC, CI C22 1-163-097-00 s CERAMIC, CI C23 1-163-097-00 s CERAMIC, CI C24 1-163-097-00 s CERAMIC, CI C25 1-163-097-00 s CERAMIC, CI	HIP 15PF 5% 50V HIP 15PF 5% 50V HIP 15PF 5% 50V HIP 15PF 5% 50V HIP 15PF 5% 50V	R16 R17 R18 R19	1-216-107-0 1-216-107-0 1-216-107-0 1-216-105-0	O S METAL, CO	HIP 270K 5% HIP 270K 5% HIP 270K 5% HIP 220K 5%	1/10W 1/10W 1/10W 1/10W
C26 1-163-097-00 s CERAMIC, CI C27 1-131-348-00 s TANTALUM 1 C28 1-131-348-00 s TANTALUM 1 C29 1-164-004-11 s CERAMIC, CI C30 1-164-004-11 s CERAMIC, CI	.5uF 10% 35V	R21 R22 R23 R24	1-216-105-0 1-216-105-0 1-216-081-0 1-216-081-0	O S METAL, CO	HIP 220K 5% HIP 220K 5% HIP 22K 5% HIP 22K 5%	1/10W 1/10W 1/10W 1/10W
C509 1-124-907-11 S ELECT 10uF C510 1-124-925-11 S ELECT 2.2ul C511 1-124-925-11 S ELECT 2.2ul C512 1-124-907-11 S ELECT 10uF C513 1-124-907-11 S ELECT 10uF	F 20% 100V F 20% 100V 20% 50V 20% 50V	R26 R27 R28 R29	1-216-075-0 1-216-121-0 1-216-121-0 1-216-057-0	O S METAL, CO	HIP 12K 5% HIP 1M 5% 1 HIP 1M 5% 1 HIP 2.2K 5%	1/10W /10W /10W /10W
C514 1-163-037-11 s CERAMIC, CI C515 1-163-037-11 s CERAMIC, CI	HIP 0.022uF 10% 25V HIP 0.022uF 10% 25V	R31	1-216-065-0	O s METAL, C O s METAL, C	HIP 4.7K 5%	1/10W
CN406 1-569-343-11 S CONNECTOR, CN408 1-506-481-11 S CONNECTOR CN409 1-506-481-11 S CONNECTOR CN410 1-506-481-11 S CN410 1-506-481-11 S CNA10 1-506-481-11 S CNA	2P, MALE 2P, MALE 2P, MALE	R33 R34 R35	1-216-033-0 1-216-033-0 1-216-025-0	O S METAL, C O S METAL, C O S METAL, C	HIP 220 5% HIP 220 5% HIP 100 5%	1/10W 1/10W 1/10W
CN411 1-506-481-11 s CONNECTOR 3  D1 8-719-123-82 s DIODE 1SS3  D2 8-719-123-82 s DIODE 1SS3  D3 8-719-123-82 s DIODE 1SS3	03-T1	R37 R38	1-216-025-0 1-216-025-0 1-216-081-0	O S METAL, CO	HIP 100 5% HIP 100 5% HIP 22K 5%	1/10W 1/10W 1/10W
D2 8-719-123-82 S D10DE 1SS3( D3 8-719-123-82 S D10DE 1SS3( IC1 8-759-745-60 S IC NJM4560I IC2 8-759-145-57 S IC UPC4557( IC3 8-759-145-57 S IC UPC4557( IC4 8-759-140-53 S IC UPD4053I IC5 8-759-745-60 S IC NJM4560I IC503 8-759-520-06 S IC XRA17809 IC504 8-759-982-39 S IC RC7909FA IC505 8-759-603-69 S IC M51957BI Q1 8-729-117-32 S TRANSISTOR Q2 8-729-117-32 S TRANSISTOR Q3 8-729-117-32 S TRANSISTOR	D C BC D	R41 R42 R43 R44 R45	1-216-057-0 1-216-081-0 1-216-071-0	O S METAL, CO	HIP 2.2K 5% HIP 22K 5% HIP 8.2K 5%	1/10W 1/10W 1/10W
IC503 8-759-520-06 s IC XRA17809 IC504 8-759-982-39 s IC RC7909FA IC505 8-759-603-69 s IC M51957BB	9T A L	R46 R47 R48	1-216-121-0 1-216-121-0	O S METAL, C O S METAL, C O S METAL, C	HIP 1M 5% 1 HIP 1M 5% 1	/10W /10W
Q1 8-729-117-32 s TRANSISTOR Q2 8-729-117-32 s TRANSISTOR	2SC4177 2SC4177	R49 R50	1-216-121-0	O S METAL, C O S METAL, C	HIP 1M 5% 1	/10W
Q3 8-729-117-32 s TRANSISTOR	ZSU4177	R51	1-216-121-0	O s METAL, C	H1P 1M 5% 1	/ TOM

# (MA-44B BOARD)

Ref. No. or Q'ty	Part No. SP	Description
R52 R53 R54 R55 R56	1-216-121-00 s 1-216-097-00 s 1-216-121-00 s	METAL, CHIP 1M 5% 1/10W METAL, CHIP 1M 5% 1/10W METAL, CHIP 100K 5% 1/10W METAL, CHIP 1M 5% 1/10W METAL, CHIP 1M 5% 1/10W
R57 R58 R59 R60 R61	1-216-067-00 s 1-216-121-00 s	METAL, CHIP 47K 5% 1/10W METAL, CHIP 5.6K 5% 1/10W METAL, CHIP 1M 5% 1/10W METAL, CHIP 1M 5% 1/10W METAL, CHIP 1M 5% 1/10W
R62 R501	1-216-121-00 s 1-216-089-00 s	METAL, CHIP 1M 5% 1/10W METAL, CHIP 47K 5% 1/10W
RV1 RV2	1-241-123-11 s 1-241-123-11 s	RES, ADJ CARBON 47K RES, ADJ CARBON 47K

### MB-322B BOARD

D-6 N-	<del> </del>
Ref. No or Q'ty	Part No. SP Description
1pc	A-8276-209-A o MOUNTED CIRCUIT BOARD, MB-322B
C101 C102	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
CN103	1-573-598-11 s CONNECTOR, PHEC 100P, FEMALE 1-573-598-11 s CONNECTOR, PHEC 100P, FEMALE 1-573-598-11 s CONNECTOR, PHEC 100P, FEMALE 1-573-598-11 s CONNECTOR, PHEC 100P, FEMALE
CN110 CN111 CN113 CN114 CN139	1-573-598-11 S CONNECTOR, PHEC 100P, FEMALE
CN140 CN141 CN150 CN151 CN200	1-573-598-31 s CONNECTOR, PHEC 100P, FEMALE 1-573-598-11 s CONNECTOR, PHEC 100P, FEMALE 1-568-950-11 o CONNECTOR 12P, MALE 1-568-950-11 o CONNECTOR 12P, MALE 1-568-945-11 o CONNECTOR 7P, MALE
CN202 CN203 CN204 CN205 CN206	1-568-948-11 o CONNECTOR 10P, MALE 1-506-493-11 s CONNECTOR 14P, MALE 1-568-949-11 o CONNECTOR 11P, MALE 1-568-942-11 o CONNECTOR 4P, MALE 1-568-944-11 o CONNECTOR 6P, MALE
CN207 CN211 CN212 CN213 CN214	1-568-943-11 O CONNECTOR 5P, MALE 1-506-476-11 S CONNECTOR 11P, MALE 1-506-471-11 S CONNECTOR 6P, MALE 1-568-955-11 O CONNECTOR 6P, MALE 1-506-469-11 S CONNECTOR 4P, MALE
CN220 CN221 CN222 CN223 CN224	1-568-941-11 O CONNECTOR 3P, MALE 1-565-879-11 S CONNECTOR 7P, MALE 1-565-883-11 O CONNECTOR 11P, MALE 1-565-882-11 O CONNECTOR 10P, MALE 1-568-934-11 O CONNECTOR 7P, MALE
CN260 CN262 CN292 CN293 CN294	1-564-209-00 o CONNECTOR, IL-S 10P, MALE 1-690-104-11 s CABLE, FLAT 64P 1-564-216-00 o CONNECTOR, VH 5P, MALE 1-564-915-11 o CONNECTOR, VH 7P, MALE
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### PD-56 BOARD

Dof No		
Ref. No. or Q'ty	Part No. SP	Description
#1pc	1-640-162-13 o	PRINTED CIRCUIT BOARD, PD-56
CN914 CN915 CN916	1-506-472-11 s 1-506-467-11 s 1-508-900-00 s	CONNECTOR 7P, MALE CONNECTOR 2P, MALE CONNECTOR 2P, MALE

### PTC-39 BOARD

Ref. No. or Q'ty	Part No. SP Description
1pc 1pc	1-633-548-13 o PRINTED CIRCUIT BOARD, PTC-39 2-124-699-02 o HOLDER, SENSOR
C2	1-162-875-11 s CERAMIC 68PF 5% 50V 1-162-875-11 s CERAMIC 68PF 5% 50V 1-126-154-11 s ELECT 47uF 20% 6.3V 1-161-051-00 s CERAMIC 0.01uF 10% 50V 1-161-051-00 s CERAMIC 0.01uF 10% 50V
CN1	1-506-471-11 s CONNECTOR 6P, MALE
DME1	8-745-001-02 s DME DM-211A
IC1 IC2 IC3 IC4	8-759-145-58 s IC UPC4558C 8-759-981-64 s IC LM2903DQ 8-719-985-75 s PHOTOINTERRUPTER GP1A53HR 8-719-985-74 s PHOTOINTERRUPTER GP1A52HR
<b>Q</b> 1	8-729-900-33 s TRANSISTOR DTC144EF
K4	1-247-895-00 s CARBON 470K 5% 1/4W 1-249-425-11 s CARBON 4.7K 5% 1/4W 1-247-887-00 s CARBON 220K 5% 1/4W 1-249-433-11 s CARBON 22K 5% 1/4W 1-249-433-11 s CARBON 22K 5% 1/4W
R7 R8	1-249-433-11 s CARBON 22K 5% 1/4W 1-247-895-00 s CARBON 470K 5% 1/4W 1-249-425-11 s CARBON 4.7K 5% 1/4W 1-247-887-00 s CARBON 220K 5% 1/4W 1-249-433-11 s CARBON 22K 5% 1/4W
R11 R12	1-249-433-11 s CARBON 22K 5% 1/4W 1-249-433-11 s CARBON 22K 5% 1/4W 1-249-406-11 s CARBON 120 5% 1/4W
RV1 RV2	1-228-472-00 s RES, ADJ METAL 2K 1-228-472-00 s RES, ADJ METAL 2K

### PTC-42 BOARD

Ref. No. or Q'ty	Part No. SP Description
1pc	1-640-168-12 o PRINTED CIRCUIT BOARD, PTC-42
CN924	1-506-483-21 s CONNECTOR 4P, MALE
R1 R2	1-249-409-11 s CARBON 220 5% 1/4W 1-249-409-11 s CARBON 220 5% 1/4W

#### PTC-49 BOARD

Ref. No. or Q'ty Part No. SP Description 1-640-164-11 o PRINTED CIRCUIT BOARD, PTC-49

1-506-488-11 s CONNECTOR 9P, MALE 1-506-482-11 s CONNECTOR 3P, MALE 1-506-481-11 s CONNECTOR 2P, MALE CN901 CN902 CN903

8-719-939-05 s PHOTOINTERRUPTER GP-1S54 PH1 8-719-939-05 s PHOTOINTERRUPTER GP-1S54 PH2

1-249-409-11 s CARBON 220 5% 1/4W 1-249-409-11 s CARBON 220 5% 1/4W

#### PTC-54 BOARD

Ref. No. or Q'ty Part No. SP Description

1-640-163-11 o PRINTED CIRCUIT BOARD, PTC-54

CN904 1-506-482-11 s CONNECTOR 3P, MALE

8-719-939-05 s PHOTOINTERRUPTER GP-1S54 PH1

#### PTC-55 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-640-165-11 o PRINTED CIRCUIT BOARD, PTC-55 1pc

1-506-470-11 s CONNECTOR 5P, MALE CN922

8-719-938-07 s LED GL480, INFRARED 8-719-938-07 s LED GL480, INFRARED 8-719-938-07 s LED GL480, INFRARED D3

8-729-903-81 s PHOTOTRANSISTOR PT480

8-729-903-81 s PHOTOTRANSISTOR PT480 8-729-903-81 s PHOTOTRANSISTOR PT480

#### RM-82 BOARD

Ref. No. or Q'ty Part No. SP Description

1-640-166-12 o PRINTED CIRCUIT BOARD, RM-82 2pcs

1-563-233-11 o CONNECTOR, FPC 13P 1-563-233-11 o CONNECTOR, FPC 13P 1-506-469-11 s CONNECTOR 4P, MALE 1-506-469-11 s CONNECTOR 4P, MALE 1-506-468-11 s CONNECTOR 3P, MALE CN923 CN923 CN926 CN926 CN927

CN927 1-506-468-11 s CONNECTOR 3P, MALE

#### RM-93A BOARD

Ref. No. or Q'ty Part No. SP Description

1-640-048-21 o PRINTED CIRCUIT BOARD, RM-93A 1pc

C700 1-124-122-11 s ELECT 100uF 20% 50V

CN700

CN705

1-506-472-11 s CONNECTOR 7P, MALE 1-563-770-11 s CONNECTOR, D-SUB 9P, FEMALE 1-566-765-11 o CONNECTOR 10P, MALE 1-566-319-11 o CONNECTOR, D-SUB 15P, MALE 1-508-900-00 s CONNECTOR 2P, MALE CN710 CN715

CN720

R700 1-215-909-11 s METAL 47 5% 3W

RP-57BP	BOARD	(RP-57BP	BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
1pc 1pc	A-8271-389-A O MOUNTED CIRCUIT BOARD, RP-57BP 3-171-456-02 O SHEET (S), CARD 3-171-485-02 O GUARD, EDGE		
1pc	7-521-759-45 S SCREW +PSW 2.6X6	D702 D703	8-719-123-82 s DIODE 1SS303-T1 8-719-123-85 s DIODE 1SS304
1pc 1pc	4-352-844-01 s PIN, LEAD, COATING 1-535-894-11 o TAB, FASTON	IC2 IC102 IC202 IC302	1-809-458-11 s HIC (PRE-AMP) 1-809-458-11 s HIC (PRE-AMP) 1-809-458-11 s HIC (PRE-AMP) 1-809-458-11 s HIC (PRE-AMP)
C11 C12 C13	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	IC701	8-759-982-05 s IC RC7805FA
C16 C111	1-126-101-11 s ELECT 100uF 20% 16V 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	IC704 IC705	8-759-982-25 s IC RC78L09A 8-759-982-25 s IC RC78L09A 8-759-982-38 s IC UPC7905H
C112 C113	1-126-101-11 s ELECT 100uF 20% 16V 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V	IC811	
C116 C211 C212	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-126-101-11 s ELECT 100UF 20% 16V	L701 L703 L704 L801	1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-410-482-31 s INDUCTOR 100uH 1-410-482-31 s INDUCTOR 100uH
C213 C215 C216	1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC. CHIP 0.1uF 10% 25V	L802 0204	1-410-482-31 s INDUCTOR 100uH 8-729-117-72 s TRANSISTOR 2SC4178
C311	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-126-101-11 s ELECT 100uF 20% 16V	Q304	8-729-117-72 S TRANSISTOR 2SC4178
C313 C315 C316	1-126-101-11 S ELECT 100UF 20% 16V  1-163-227-11 S CERAMIC, CHIP 10PF 5% 50V 1-164-004-11 S CERAMIC, CHIP 0.1UF 10% 25V 1-164-004-11 S CERAMIC, CHIP 0.1UF 10% 25V 1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V 1-124-477-11 S ELECT 47UF 20% 25V	R20 R24 R25	1-216-001-00 S METAL, CHIP 10 5% 1/10W 1-216-683-11 S METAL, CHIP 22K 0.5% 1/10W 1-216-620-11 S METAL, CHIP 51 0.5% 1/10W 1-216-051-00 S METAL, CHIP 1.2K 5% 1/10W
C701 #C702	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V	R26 R28	1-216-295-00 s METAL, CHIP 0 1-216-025-00 s METAL, CHIP 100 5% 1/10W
#C703 C704 C705	1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC CHIP 0.022uF 10% 25V	R119 R120	1-216-001-00 s METAL, CHIP 10 5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-6820-11 s METAL, CHIP 51 0.5% 1/10W
#C706 C712	1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	R125	1-216-051-00 s METAL, CHIP 1.2K 5% 1/10W
#C713 #C714	1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V	R126 R127 R219	1-216-295-00 S METAL, CHIP 0 1-216-025-00 S METAL, CHIP 100 5% 1/10W 1-216-001-00 S METAL, CHIP 10 5% 1/10W
C715 C716 #C717	1-124-477-11 S ELECT 47uF 20% 25V  1-124-477-11 S ELECT 47uF 20% 25V  1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V  1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V  1-124-477-11 S ELECT 47uF 20% 25V  1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V  1-124-477-11 S ELECT 47uF 20% 25V  1-124-477-11 S ELECT 47uF 20% 25V  1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V  1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V  1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V  1-124-477-11 S ELECT 47uF 20% 25V	R220 R222	1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
C718 #C719	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V	R223 R224	1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-620-11 s METAL, CHIP 51 0.5% 1/10W
C720 #C721 #C722	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V	R226	1-216-625-11 s METAL, CHIP 82 0.5% 1/10W 1-216-295-00 s METAL, CHIP 0 1-216-025-00 s METAL, CHIP 100 5% 1/10W
C723 C724	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	R320	1-216-001-00 s METAL, CHIP 10 5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
#C725 C801 C802	1-124-477-11 s ELECT 47uF 20% 25V	R323	1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-620-11 s METAL, CHIP 51 0.5% 1/10W
C803 C804	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	R326	1-216-625-11 s METAL, CHIP 82 0.5% 1/10W 1-216-295-00 s METAL, CHIP 0
C805 C811 C812	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	R801	1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-625-11 s METAL, CHIP 82 0.5% 1/10W
	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	R812	1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-625-11 s METAL, CHIP 82 0.5% 1/10W 1-216-295-00 s METAL, CHIP 0
CN1 CN2 CN1 O1	1-506-468-11 o CONNECTOR 3P, MALE 1-506-468-11 o CONNECTOR 3P, MALE	R902	1-216-295-00 s METAL, CHIP 0 1-216-295-00 s METAL, CHIP 0 1-216-295-00 s METAL, CHIP 0
CN101 CN102 CN114		R904 R905	1-216-295-00 s METAL, CHIP 0 1-216-295-00 s METAL, CHIP 0

#### (RP-57BP BOARD)

Ref. No. or Q'ty Part No. SP Description

R906 1-216-295-00 s METAL, CHIP 0

RV4 1-238-804-11 s RES, ADJ METAL 50K RV104 1-238-804-11 s RES, ADJ METAL 50K RV204 1-238-804-11 s RES, ADJ METAL 50K RV304 1-238-804-11 s RES, ADJ METAL 50K

T2 1-427-595-11 s TRANSFORMER, RF INPUT T102 1-427-595-11 s TRANSFORMER, RF INPUT T202 1-427-591-11 s TRANSFORMER, RF INPUT T302 1-427-591-11 s TRANSFORMER, RF INPUT

SS-48P BOARD

Ref. No. or Q'ty Part No. SP Description This board includes the EQ-42 board. A-6717-637-A o MOUNTED CIRCUIT BOARD, SS-48P 3-171-453-03 o PLATE (L), SHIELD, CARD 3-171-454-02 o SHEET (L), CARD 7-621-759-45 s SCREW +PSW 2.6X6 2-251-622-11 s LEVER, PC BOARD 1pc 1pc 1pc 2pcs 1-163-091-00 s CERAMIC, CHIP 8PF 50V 1-163-091-00 s CERAMIC, CHIP 8PF 50V 1-131-347-00 s TANTALUM 1uF 10% 35V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C1 C2 C3 C4 Č5 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V Č7 Č9 Č10 C11 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C12 C14 C15 C101 C102 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-110-00 s CERAMIC, CHIP 51PF 5% 50V C103 C104 C105 C106 C107 1-163-110-00 s CERAMIC, CHIP 51PF 5% 50V 1-163-110-00 s CERAMIC, CHIP 51PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C108 C109 C116 C117 C118 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V C119 C120 C121 C126 C127 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C301 C302 C304 C401 C402 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V 1-131-342-00 s TANTALUM 0.15uF 10% 35V C403 C404 C405 C406 C407 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C408 C409 C410 C411 C412 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-907-11 s ELECT 10uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C413 C414 C415 C416 C417 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-907-11 s ELECT 10uF 20% 50V C418 C423

(SS-48P	BOARD)	(SS-48P BOA	ARD)	
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Pa	art No. SP Descripti	on
C424 C425 C426 C427 C450	1-124-907-11 s ELECT 10uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C630 1- C631 1- C632 1-	-163-227-11 S CERAMIC, -163-037-11 S CERAMIC, -163-037-11 S CERAMIC, -163-037-11 S CERAMIC, -163-037-11 S CERAMIC,	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V
C451 C452 C453 C454 C456	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-124-907-11 s ELECT 10uF 20% 50V 1-124-141-00 s ELECT 330uF 20% 10V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C635 1- C636 1- C637 1-	-163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V
C457 C458 C501 C502 C503	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-014-00 s CERAMIC, CHIP 0.0027uF 10% 50V 1-131-351-00 s TANTALUM 4.7uF 10% 35V 1-131-345-00 s TANTALUM 0.47uF 10% 35V	C640 1- C642 1- C643 1-	-163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V
C504 C505 C506 C507 C508	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-130-475-00 s MYLAR 0.0022uF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V	C646 1- C647 1- C648 1-	-163-275-11 s CERAMIC, -164-232-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-275-11 s CERAMIC,	CHIP 0.01uF 10% 100V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V
C509 C510 C511 C512 C513	1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-162-871-11 s CERAMIC 47PF 5% 50V	C701 1- C702 1- C703 1-	-163-037-11 s CERAMIC, -163-229-11 s CERAMIC, -163-229-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC,	CHIP 12PF 5% 50V CHIP 12PF 5% 50V CHIP 0.022uF 10% 25V
C515 C516 C518 C519 C520	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C706 1- C707 1- C708 1-	-163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V
C521 C522 C523 C524 C601	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V 1-124-477-11 s ELECT 47uF 20% 25V	C711 1- C712 1- C713 1-	-163-275-11 s CERAMIC, -163-275-11 s CERAMIC, -163-037-11 s CERAMIC, -163-229-11 s CERAMIC, -163-229-11 s CERAMIC,	CHIP 0.001uF 5% 50V CHIP 0.022uF 10% 25V CHIP 12PF 5% 50V
C602 C603 C604 C605 C606	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C716 1- C718 1- C720 1-	-163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-017-00 s CERAMIC, -163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.0047uF 5% 50V
C607 C608 C609 C610 C611	1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V	C804 1- C805 1- C806 1-	-163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V
C612 C613 C614 C616 C617	1-124-477-11 s ELECT 47uF 20% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V 1-131-347-00 s TANTALUM 1uF 10% 35V 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V	C811 1- C813 1- C814 1-	-164-232-11 s CERAMIC, -164-232-11 s CERAMIC, -164-161-11 s CERAMIC, -164-161-11 s CERAMIC, -163-037-11 s CERAMIC,	CHIP 0.01uF 10% 100V CHIP 0.0022uF 10% 100V CHIP 0.0022uF 10% 100V
C619 C620 C621 C622 C623	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V	C820 1- C822 1- C824 1-	-163-037-11 s CERAMIC, -124-903-11 s ELECT 1uF -163-037-11 s CERAMIC, -163-037-11 s CERAMIC, -163-037-11 s CERAMIC,	20% 50V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V
C624 C626 C627 C628	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V	CN139 1- CN140 1-	-506-484-11 s CONNECTOR -573-600-21 s CONNECTOR -573-600-21 s CONNECTOR -573-600-21 s CONNECTOR	, PHEC 100P, MALE , PHEC 100P, MALE

(SS-48P BOARD)	(SS-48P BOARD)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
CNI7 1-526-660-21 o SOCKET, IC 32P	IC107 8-759-926-30 s IC AM26LS30PC IC301 8-759-154-71 s IC CXD8176Q
CNI7 1-526-660-21 O SOCKET, IC 32P  CNI403 1-526-950-11 O SOCKET, IC 64P  CNI607 1-526-660-21 O SOCKET, IC 32P  COP1 1-565-413-11 O PLUG, SHORTING  COP2 1-565-413-11 O PLUG, SHORTING	IC302 8-759-938-68 s IC CXD1095Q IC303 8-759-054-54 s IC SRM2016M10 IC401 8-759-154-71 s IC CXD8176Q
CNI403 1-526-950-11 0 SOCKET, IC 64P CNI607 1-526-660-21 0 SOCKET, IC 32P COP1 1-565-413-11 0 PLUG, SHORTING COP2 1-565-413-11 0 PLUG, SHORTING COP3 1-565-413-11 0 PLUG, SHORTING COP4 1-565-413-11 0 PLUG, SHORTING COP4 1-691-246-11 0 CONNECTOR 12P, MALE	IC402 8-759-043-35 s IC CXD8311Q IC403 8-759-071-54 s IC TMP91C640N-2305
COP4 1-565-413-11 o PLUG, SHORTING	IC404 8-759-009-51 s IC MC14538BF IC405 8-759-500-93 s IC MB90061-111
COR1 1-691-246-11 o CONNECTOR 12P, MALE	IC406 8-759-054-54 s IC SRM2016M10
CV401 1-141-390-11 s CAP, TRIMMER 90PF CV402 1-141-245-00 s CAP, TRIMMER 30PF	IC407 8-759-926-77 s IC SN74HC541NS IC408 8-759-982-21 s IC RC78L05A IC410 8-759-996-43 s IC RC4558PS
D101 8-719-941-23 s DIODE DA204U D102 8-719-941-23 s DIODE DA204U	
D101 8-719-941-23 s DIODE DA204U D102 8-719-941-23 s DIODE DA204U D301 8-719-800-60 s LED TLR214, RED D401 8-719-941-23 s DIODE DA204U D402 8-719-941-23 s DIODE DA204U D403 8-719-941-23 s DIODE DA204U D404 8-719-941-23 s DIODE DA204U	IC413 8-759-700-07 s IC NJM2903M IC414 8-759-927-46 s IC SN74HC00NS
D403 8-719-941-23 s DIODE DA204U D404 8-719-941-23 s DIODE DA204U	IC501 8-759-944-79 s IC CXD1132Q IC502 8-759-925-76 s IC SN74HC08NS IC504 8-759-925-85 s IC SN74HC32NS
D404 8-719-941-23 S DIODE DAZO4U D405 8-719-941-23 S DIODE DAZO4U D406 8-719-941-23 S DIODE DAZO4U	IC505 8-759-009-51 s IC MC14538BF
D601 8-719-941-23 s DIODE DA204U	IC506 8-759-300-71 s IC HD14053BFP IC507 8-759-009-02 s IC MC14046BF
D602 8-719-941-23 s DIODE DA204U D603 8-719-941-23 s DIODE DA204U D604 8-719-941-23 s DIODE DA204U	IC508 8-759-925-76 s IC SN74HC08NS IC510 8-759-926-18 s IC SN74HC157ANS
D605 8-719-941-23 s DIODE DA204U D606 8-719-941-23 s DIODE DA204U	IC511 8-759-938-68 s IC CXD1095Q IC514 8-759-927-29 s IC SN74HCU04NS
D607 8-719-941-23 s DIODE DA204U D608 8-719-941-23 s DIODE DA204U	IC601 8-759-100-94 s IC UPC358G2 IC602 8-759-009-05 s IC MC14051BF IC603 8-759-100-94 s IC UPC358G2
D609 8-719-941-23 s DIODE DA204U D610 8-719-941-23 s DIODE DA204U	IC604 8-759-323-88 s IC HD6435328RA00F IC605 8-759-925-76 s IC SN74HC08NS
D612 8-719-941-23 s DIODE DA204U	IC606 8-759-925-85 s IC SN74HC32NS IC607 8-759-085-11 o IC C010-PW2000SV-V212, EPROM
D613 8-719-941-23 s DIODE DA204U D614 8-719-941-23 s DIODE DA204U D615 8-719-941-23 s DIODE DA204U	IC608 8-759-926-11 s IC SN74HC138NS IC609 8-759-926-11 s IC SN74HC138NS
D616 8-719-123-82 s DIODE 1SS303-T1	IC610 8-759-925-79 s IC SN74HC11ANS IC611 8-759-925-83 s IC SN74HC27ANS
D701 8-719-938-72 s DIODE SB01-05CP D702 8-719-941-23 s DIODE DA204U D703 8-719-941-23 s DIODE DA204U	IC612 8-759-054-54 s IC SRM2016M10 IC613 8-759-925-74 s IC TC74HC04NS
D801 8-719-941-23 s DIODE DA204U	IC615 8-759-938-68 s IC CXD1095Q IC616 8-759-300-71 s IC HD14053BFP
IC1 8-759-151-97 s IC UPD70320GJ-8-5BG IC2 8-759-926-77 s IC SN74HC541NS IC3 8-759-925-74 s IC TC74HC04NS	IC618 8-759-926-77 s IC SN74HC541NS IC619 8-759-926-77 s IC SN74HC541NS IC620 8-759-926-49 s IC SN74HC245NS
IC3 8-759-925-74 \$ IC IC74nC04nS IC4 8-759-603-32 \$ IC M51958BL IC5 8-759-043-34 \$ IC CXD8310M	IC621 8-759-300-71 s IC HD14053BFP
IC6 8-752-337-78 s IC CXK58257AM-10L IC7 8-759-065-11 o IC C010-PW2000SY-V202, EPROM	IC622 8-759-009-51 s IC MC14538BF IC701 8-752-343-05 s IC CXD2202Q IC702 8-759-300-71 s IC HD14053BFP
IC8 8-759-925-90 s IC SN74HC74NS IC10 8-759-925-85 s IC SN74HC32NS	IC703 8-759-239-23 s IC TC74HC86AF
IC11 8-759-925-76 s IC SN74HC08NS IC15 8-759-925-80 s IC SN74HC14NS	IC704 8-759-700-07 s IC NJM2903M IC706 8-759-154-71 s IC CXD8176Q #IC707 8-752-323-63 s IC CXK5816M-10L
IC101 8-759-109-04 s IC UPD7201AC IC102 8-759-009-10 s IC MC14069UBF	IC709 8-759-925-76 s IC SN74HC08NS IC710 8-752-831-22 s IC CXP80P116Q-1-024
IC103 8-759-926-17 s IC SN74HC153NS IC104 8-759-925-85 s IC SN74HC32NS	IC711 8-759-100-95 s IC UPC324G2 IC801 8-759-100-95 s IC UPC324G2
IC105 8-759-926-30 s IC AM26LS30PC IC106 8-759-926-32 s IC AM26LS32PC	IC802 8-759-141-05 s IC UPC4574G2 IC803 8-759-008-67 s IC MC14066BF

R19

R125

(SS-48P	BOARD)	(SS-48P BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
R507 R508 R509 R510 R511	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W	R619 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R620 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R621 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R622 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R624 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R512 R513 R514 R515 R516	1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	R626 1-216-089-00 s METAL, CHIP 47K 5% 1/10W R627 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R629 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R630 1-216-089-00 s METAL, CHIP 47K 5% 1/10W R631 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R517 R518 R519 R521 R522	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-033-00 s METAL, CHIP 220 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-121-00 s METAL, CHIP 1M 5% 1/10W	R632 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
R523 R524 R525 R526 R527	1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W	R638 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R639 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R640 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R641 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R642 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R528 R529 R530 R531 R532	1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W	R643 1-216-089-00 s METAL, CHIP 47K 5% 1/10W R644 1-216-089-00 s METAL, CHIP 47K 5% 1/10W R646 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R647 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R648 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R533 R534 R535 R536 R537	1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W	R649 1-216-105-00 s METAL, CHIP 220K 5% 1/10W R650 1-216-105-00 s METAL, CHIP 220K 5% 1/10W R651 1-216-085-00 s METAL, CHIP 33K 5% 1/10W R653 1-216-045-00 s METAL, CHIP 680 5% 1/10W R654 1-216-045-00 s METAL, CHIP 680 5% 1/10W
R538 R539 R541 R542 R543	1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W	R655 1-216-045-00 s METAL, CHIP 680 5% 1/10W 1-216-045-00 s METAL, CHIP 680 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-071-00 s METAL, CHIP 8.2K 5% 1/10W
R544 R545 R546 R547 R548	1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W	R662 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R663 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R664 1-216-029-00 s METAL, CHIP 150 5% 1/10W R669 1-216-025-00 s METAL, CHIP 100 5% 1/10W R669 1-216-025-00 s METAL, CHIP 100 5% 1/10W
R549 R601 R602 R603 R604	1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R670 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-295-00 s METAL, CHIP 0 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R673 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R605 R606 R607 R608 R609	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R675 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R676 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R677 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R678 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R679 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R610 R611 R612 R613 R614	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-085-00 s METAL, CHIP 33K 5% 1/10W 1-216-109-00 s METAL, CHIP 330K 5% 1/10W 1-216-085-00 s METAL, CHIP 33K 5% 1/10W 1-216-109-00 s METAL, CHIP 330K 5% 1/10W	R680 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R701 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R702 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R703 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R704 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R615 R616 R617 R618	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W	R705 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R706 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R707 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R708 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

(SS-48P BOARD)

Ref. No. or Q'ty Part No. SP Description 1-571-967-11 s SWITCH, DIP 8-CKT 1-553-812-00 s SWITCH, PUSH S602 1-577-076-11 s CRYSTAL 16.00MHz 1-567-870-11 s RESONATOR, CERAMIC 614KHz 1-567-132-00 s RESONATOR, CERAMIC 8.00MHz 1-579-458-11 s CRYSTAL 17.734475MHz 1-567-867-11 s CRYSTAL 14.500MHz X101 X401 X402 X501 X601 1-577-121-11 s CRYSTAL 20.00MHz X701 1-577-121-11 s CRYSTAL 20.00MHz 1-577-076-11 s CRYSTAL 16.00MHz X702

SW-444B BOARD

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Ref. No.
or Q'ty Part No.
                                     SP Description
                1-640-043-31 o PRINTED CIRCUIT BOARD, SW-444A 3-171-416-01 o HOLDER, LED 3-717-672-01 o STOPPER, KY
1pc
1pc
                1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C1
                1-568-951-11 0 CONNECTOR 2P, MALE
1-568-934-11 0 CONNECTOR 7P, MALE
1-568-951-91 0 CONNECTOR 2P, MALE
1-566-761-11 0 CONNECTOR 6P, MALE
1-506-481-11 s CONNECTOR 2P, MALE
CN509
CN510
CN511
CN512
CN513
                8-719-820-28 s LED TLG-256, GRN
                8-719-820-28 s LED TLG-256, GRN
D2
                8-719-820-28 S LED TLG-256, GRN
8-719-820-28 S LED TLG-256, GRN
D3
D4
                8-719-820-28 s LED TLG-256, GRN
D5
                8-719-820-27 s LED TLY-256, YEL 8-719-820-27 s LED TLY-256, YEL
D6
D7
                1-249-411-11 s CARBON 330 5% 1/4W 1-249-409-11 s CARBON 220 5% 1/4W 1-249-411-11 s CARBON 330 5% 1/4W 1-249-409-11 s CARBON 220 5% 1/4W
R1
R2
R3
R4
                1-249-411-11 s CARBON 330 5% 1/4W
                1-516-995-00 s SWITCH, LEVER SLIDE
1-516-961-00 s SWITCH, LEVER SLIDE
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TBC-18P BOARD	(TBC-18P BOARD)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc A-6727-378-A 0 MOUNTED CIRCUIT BOARD, TBC-18P 1pc 3-171-453-03 0 PLATE (L), SHIELD, CARD 1pc 3-171-454-02 0 SHEET (L), CARD 1pc 7-621-759-45 s SCREW +PSW 2.6X6 2pcs 2-251-622-11 s LEVER, PC BOARD	C219 1-124-477-11 s ELECT 47uF 20% 25V C221 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C222 1-124-477-11 s ELECT 47uF 20% 25V C224 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C225 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
C1	C226 1-126-176-11 s ELECT 220uF 20% 10V C227 1-124-477-11 s ELECT 47uF 20% 25V C228 1-124-477-11 s ELECT 47uF 20% 25V C229 1-124-907-11 s ELECT 10uF 20% 50V C231 1-126-101-11 s ELECT 100uF 20% 16V
C6 1-126-101-11 s ELECT 100uF 20% 16V C7 1-126-101-11 s ELECT 100uF 20% 16V C8 1-126-101-11 s ELECT 100uF 20% 16V C9 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C10 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C300 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C302 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C303 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C304 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V C305 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
C11 1-126-101-11 S ELECT 1000F 20% 16V C12 1-126-101-11 S ELECT 1000F 20% 16V C13 1-126-101-11 S ELECT 1000F 20% 16V C14 1-126-101-11 S ELECT 1000F 20% 16V C15 1-126-101-11 S ELECT 1000F 20% 16V	C307 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C308 1-124-903-11 s ELECT 1uF 20% 50V C309 1-124-903-11 s ELECT 1uF 20% 50V C310 1-124-927-11 s ELECT 4.7uF 20% 100V
C16 1-126-101-11 s ELECT 100uF 20% 16V C17 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C18 1-126-101-11 s ELECT 100uF 20% 16V C19 1-126-101-11 s ELECT 100uF 20% 16V C20 1-126-101-11 s ELECT 100uF 20% 16V	C311 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V C312 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C313 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C314 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C315 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
C100 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C101 1-124-477-11 s ELECT 47uF 20% 25V C102 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V C103 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V C104 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	
C105 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C106 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C107 1-124-477-11 s ELECT 47uF 20% 25V C108 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C109 1-124-903-11 s ELECT 1uF 20% 50V	C322 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C323 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C324 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C325 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V C326 1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V
C110 1-124-907-11 s ELECT 10uF 20% 50V C119 1-124-477-11 s ELECT 47uF 20% 25V C120 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C121 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C122 1-124-477-11 s ELECT 47uF 20% 25V	C327 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V C328 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C329 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V C330 1-126-101-11 s ELECT 100uF 20% 16V C331 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C124 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C126 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C127 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C128 1-126-176-11 s ELECT 220uF 20% 10V C129 1-124-477-11 s ELECT 47uF 20% 25V	C333 1-124-907-11 s ELECT 10uF 20% 50V C334 1-124-925-11 s ELECT 2.2uF 20% 100V C335 1-164-222-11 s CERAMIC, CHIP 0.22uF 25V C336 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V C337 1-124-927-11 s ELECT 4.7uF 20% 100V
C130	C338 1-164-222-11 s CERAMIC, CHIP 0.22uF 25V C339 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C340 1-124-477-11 s ELECT 47uF 20% 25V C341 1-124-477-11 s ELECT 47uF 20% 25V C342 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C202 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V C203 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V C204 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C205 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C206 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C344 1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V C345 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C346 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C347 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C348 1-124-477-11 s ELECT 47uF 20% 25V
C207 1-124-477-11 s ELECT 47uF 20% 25V C208 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C209 1-124-903-11 s ELECT 1uF 20% 50V C210 1-124-907-11 s ELECT 10uF 20% 50V	C349 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C350 1-124-477-11 s ELECT 47uF 20% 25V C351 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V C352 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V

(TBC-18P	BOARD)	(TBC-18P	BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
C353	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C437	1-124-477-11 s ELECT 47uF 20% 25V
C357	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C438	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C358	1-124-925-11 s ELECT 2.2uF 20% 100V	C440	1-163-009-11 s CERAMIC, CHIP 0.001uF 10% 50V
C359	1-124-927-11 s ELECT 4.7uF 20% 100V	C441	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C360	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C442	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C361	1-124-477-11 s ELECT 47uF 20% 25V	C443	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C362	1-124-477-11 s ELECT 47uF 20% 25V	C444	
C363	1-124-477-11 s ELECT 47uF 20% 25V	C445	
C364	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C446	
C365	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C447	
C366	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C448	1-124-477-11 s ELECT 47uF 20% 25V
C371	1-124-477-11 s ELECT 47uF 20% 25V	C449	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C372	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C451	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C373	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C452	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C374	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C453	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
C375	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V	C454	1-124-925-11 s ELECT 2.2uF 20% 100V
C376	1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V	C455	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C377	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C456	1-124-477-11 s ELECT 47uF 20% 25V
C378	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C457	1-124-477-11 s ELECT 47uF 20% 25V
C379	1-126-101-11 s ELECT 100UF 20% 16V	C458	1-163-222-11 s CERAMIC, CHIP 5PF 50V
C380	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	C459	1-163-102-00 s CERAMIC, CHIP 24PF 5% 50V
C381	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C461	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
C382	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C462	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C383	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C463	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C384	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C464	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C385	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C467	1-124-477-11 s ELECT 47uF 20% 25V
C400	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C468	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C401	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C469	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C402	1-163-245-11 s CERAMIC, CHIP 56PF 5% 50V	C470	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C403	1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V	C471	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
C404	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-903-11 s ELECT 1uF 20% 50V	C472	1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
C405		C473	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V
C406		C474	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C407		C475	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C408		C476	1-126-101-11 s ELECT 100uF 20% 16V
C410	1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 100V	C477	1-124-903-11 s ELECT 1uF 20% 50V
C411	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V	C478	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C412	1-124-477-11 s ELECT 47uF 20% 25V	C479	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C414	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C500	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C415	1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V	C501	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C417	1-163-106-00 s CERAMIC, CHIP 36PF 5% 50V	C502	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C418	1-163-120-00 s CERAMIC, CHIP 130PF 5% 50V	C503	
C419	1-163-263-11 s CERAMIC, CHIP 330PF 5% 50V	C504	
C420	1-124-477-11 s ELECT 47uF 20% 25V	C505	
C421	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C506	
C422	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C507	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C423	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C508	
C424	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C509	
C426	1-163-125-00 s CERAMIC, CHIP 220PF 5% 50V	C510	
C427	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V	C511	
C428	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C512	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C429	1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V	C513	
C430	1-126-101-11 s ELECT 100uF 20% 16V	C514	
C431	1-124-907-11 s ELECT 10uF 20% 50V	C515	
C432	1-124-925-11 s ELECT 2.2uF 20% 100V	C516	
C433	1-164-222-11 s CERAMIC, CHIP 0.22uF 25V	C517	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
C434	1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V	C518	
C435	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C519	
C436	1-124-477-11 s ELECT 47uF 20% 25V	C520	

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Ref. No. or Q'ty	Part No. SP Descript	ion	Ref. No. or Q'ty	Part No. SP Description
C779 C780 C781 C782 C783	1-163-037-11 s CERAMIC, 1-164-004-11 s CERAMIC, 1-164-004-11 s CERAMIC, 1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC,	CHIP 0.1uF 10% 25V CHIP 0.1uF 10% 25V CHIP 0.022uF 10% 25V	D404 D406 D407 D408 D500	8-719-915-30 s DIODE, VARICAP FC53M 8-719-123-82 s DIODE 1SS303-T1 8-719-105-38 s DIODE RD3.0M-B1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-85 s DIODE 1SS304
C786 C788	1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC, 1-124-477-11 s ELECT 47 1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V uF 20% 25V CHIP 0.022uF 10% 25V	D501 D502 D503 D504 D506	8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1
C790 C791 C793 C794 C795	1-124-477-11 s ELECT 47 1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V	D600 D601 D602 D700 D701	8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1
C796 C797 C798	1-163-235-11 s CERAMIC, 1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC,	CHIP 0.022uF 10% 25V	D702 D706	8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1
C799 C800	1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC, 1-163-037-11 s CERAMIC.	CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V CHIP 0.022uF 10% 25V	FL500 FL501 FL502 FL600	1-239-134-21 s FILTER, LOW-PASS 1-239-136-21 s FILTER, LOW-PASS 1-239-136-21 s FILTER, LOW-PASS 1-236-091-11 s FILTER, LOW-PASS
C802 C803 C804 C805	1-124-477-11 S ELECT 47 1-163-037-11 S CERAMIC, 1-124-477-11 S ELECT 47 1-124-477-11 S ELECT 47	'uF 20% 25V CHIP 0.022uF 10% 25V 'uF 20% 25V	FL700 IC1 IC2	1-236-091-11 s FILTER, LOW-PASS 8-759-982-38 s IC UPC7905H 8-759-982-05 s IC RC7805FA
C806 C807 C809	1-124-477-11 S ELECT 47 1-124-903-11 S ELECT 1u 1-164-004-11 S CERAMIC,	ıF 20% 50V	IC3 IC4 IC5	8-759-982-05 s IC RC7805FA 8-759-982-05 s IC RC7805FA 8-759-982-38 s IC UPC7905H
C810 C811	1-161-051-00 s CERAMIC 1-161-051-00 s CERAMIC	0.01uF 10% 50V	IC6 IC7 IC8	8-759-982-25 s IC RC78L09A 8-759-982-25 s IC RC78L09A 8-759-982-21 s IC RC78L05A
C815 C816 C819 C820	1-163-037-11 s CERAMIC, 1-124-477-11 s ELECT 47 1-163-251-11 s CERAMIC, 1-162-718-11 s CERAMIC	'uF 20% 25V	IC9 IC100 IC102	8-759-982-21 s IC RC78L05A 8-759-030-74 s IC SC14S66FEL 8-759-908-17 s IC TL082CPS
C871 CN1	1-124-903-11 s ELECT 1u 1-506-471-11 s CONNECTO	IF 20% 50V	IC103 IC104 IC105	8-759-908-15 S IC TL431CLP 8-752-334-55 S IC CXD1175M 8-759-702-08 S IC NJM360M
CN2 CN105 CN106	1-506-471-11 s CONNECTO 1-573-600-21 s CONNECTO 1-573-600-21 s CONNECTO	OR 6P, MALE OR, PHEC 100P, MALE	IC200 IC201	8-759-030-74 s IC SC14S66FEL 8-759-908-17 s IC TL082CPS
CP700 CP701	1-577-295-11 s VCO, CRY 1-577-134-11 s VCO, CRY	STAL 17.734475MHz STAL 13.5MHz	IC203 IC204 IC300 IC301	8-759-908-15 s IC TL431CLP 8-752-334-55 s IC CXD1175M 8-759-996-43 s IC RC4558PS 8-752-339-03 s IC CXD2207Q
D1 D2 D3 D4 D100	8-719-941-04 s DIODE SB 8-719-941-04 s DIODE SB 8-719-941-04 s DIODE SB 8-719-941-04 s DIODE SB 8-719-941-23 s DIODE DA	1007-03CP 1007-03CP 1007-03CP 1204U	IC302 IC303 IC304 IC305	8-759-996-43 s IC RC4558PS 8-759-907-81 s IC SN74LS221NS 8-759-941-17 s IC SN74LS06NS 8-759-908-17 s IC TL082CPS 8-759-030-74 s IC SC14S66FEL
D101 D200 D300 D301 D302	8-719-123-85 s DIODE 1S 8-719-941-23 s DIODE DA 8-719-123-82 s DIODE 1S 8-719-941-23 s DIODE DA 8-719-915-30 s DIODE, V	S304 .204U S303-T1 .204U 'ARICAP FC53M	IC307 IC308 IC309 IC310	8-759-973-82 s IC TLC549IPS 8-759-991-85 s IC 74F00SJ 8-759-711-52 s IC NJU8001M 8-759-996-43 s IC RC4558PS
D303 D305 D306 D307 D309	8-719-915-30 s DIODE, V 8-719-123-82 s DIODE 1S 8-719-105-38 s DIODE RD 8-719-123-82 s DIODE 1S 8-719-911-19 s DIODE 1S	'ARICAP FC53M \S303-T1 \3.0M-B1 \S303-T1	IC312 IC313 IC401 IC402	8-759-996-43 s IC RC4558PS 8-759-941-27 s IC MB4002PF 8-759-702-08 s IC NJM360M 8-759-996-43 s IC RC4558PS 8-752-339-03 s IC CXD2207Q
D402 D403	8-719-941-23 s DIODE DA 8-719-915-30 s DIODE, V	.204U ARICAP FC53M	IC403 IC404	8-759-907-81 s IC SN74LS221NS 8-759-941-17 s IC SN74LS06NS

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Ref. No. or Q'ty	•	Ref. No. or Q'ty	Part No. SP Description
IC406	8-759-908-17 s IC TL082CPS 8-759-030-74 s IC SC14S66FEL 8-759-973-82 s IC TLC549IPS 8-759-991-85 s IC 74F00SJ 8-759-711-52 s IC NJU8001M	IC720 IC721 IC722 IC723 IC724	8-759-206-28 s IC TC74HC123F 8-759-926-35 s IC SN74HC191NS 8-759-519-49 s IC CXD8165Q 8-752-334-64 s IC CXD1171M 8-752-334-64 s IC CXD1171M
IC410 IC411 IC412 IC413 IC414	8-759-908-17 s IC TL082CPS 8-759-030-74 s IC SC14S66FEL 8-759-973-82 s IC TLC549IPS 8-759-991-85 s IC 74F00SJ 8-759-711-52 s IC NJU8001M 8-759-996-43 s IC RC4558PS 8-759-030-74 s IC SC14S66FEL 8-759-926-24 s IC SN74HC164NS 8-759-996-43 s IC RC4558PS 8-759-9941-27 s IC MB4002PF	IC725 IC726 IC727 IC728 IC729	8-759-702-08 s IC NJM360M 8-759-300-71 s IC HD14053BFP 8-752-052-77 s IC CXA1450M 8-759-980-04 s IC LM311PS 8-752-052-77 s IC CXA1450M
IC415 IC500 IC501 IC502	8-759-702-08 s IC NJM360M 8-759-930-50 s IC SN74LS157NS 8-759-055-71 s IC CXD8313Q	IC800 IC801 IC802	8-759-925-76 s IC SN74HC08NS 8-759-031-84 s IC TC7S04F 8-759-031-84 s IC TC7S04F
IC503 IC504 IC505 IC506 IC507	8-752-340-75 s IC CXX1206AM 8-752-340-75 s IC CXX1206AM 8-752-340-75 s IC CXX1206AM	L1 L2 L3 L4 L5	1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-412-533-31 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH 1-412-533-11 s INDUCTOR 47uH
IC508 IC509 IC510 IC511	8-759-513-78 s TC CXD81600	L100 L101 L102 L105 L106	1-410-478-11 s INDUCTOR 47uH 1-410-476-11 s INDUCTOR 33uH 1-410-478-11 s INDUCTOR 47uH 1-408-419-00 s INDUCTOR 68uH 1-410-478-11 s INDUCTOR 47uH
IC512 IC513 IC514 IC515 IC516	8-759-300-71 s IC HD14053BFP 8-759-996-43 s IC RC4558PS 8-759-996-43 s IC RC4558PS 8-759-996-43 s IC RC4558PS 8-752-352-34 s IC CXD1171M 8-752-052-77 s IC CXA1450M 8-752-352-34 s IC CXD1171M 8-752-352-34 s IC CXD1171M 8-752-352-35 s IC CXX1203Q 8-752-340-57 s IC CXX1203Q	L107 L200 L201 L202 L205	1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-410-476-11 s INDUCTOR 33uH 1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH
IC517 IC518 IC601	8-752-334-64 s IC CXD1171M	L206 L300 L301 L302	1-410-478-11 S INDUCTOR 470H 1-408-419-00 S INDUCTOR 680H 1-408-427-00 S INDUCTOR 3300H 1-410-492-11 S INDUCTOR 6800H
IC602 IC603 IC605 IC607	8-759-702-08 s IC NJM360M 8-759-239-23 s IC TC74HC86AF 8-752-306-51 s IC CX23065A 8-759-030-74 s IC SC14S66FEL	L302 L303 L304 L305	1-410-478-11 S INDUCTOR 47uH 1-410-478-11 S INDUCTOR 47uH 1-410-478-11 S INDUCTOR 47uH
IC608 IC609 IC610 IC611	8-752-306-51 s IC CX23065A 8-759-030-74 s IC SC14S66FEL 8-759-908-17 s IC TL082CPS 8-759-100-93 s IC UPC393G2 8-759-206-28 s IC TC74HC123F 8-759-925-90 s IC SN74HC74NS	L306 L307 L308	1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH
IC612 IC613 IC700 IC701 IC702	8-759-100-93 s IC UPC393G2 8-759-206-28 s IC TC74HC123F 8-759-925-90 s IC SN74HC74NS 8-759-925-90 s IC SN74HC74NS 8-759-925-72 s IC SN74HC02NS 8-759-300-71 s IC HD14053BFP 8-759-925-74 s IC TC74HC04NS 8-759-908-15 s IC TL431CLP 8-759-009-05 s IC MC14051BF 8-759-908-17 s IC CXA1451M 8-759-908-17 s IC TL082CPS 8-759-908-17 s IC TL082CPS 8-759-702-08 s IC UPC319G2 8-759-702-08 s IC NIM360M	L400 L401 L402 L403 L404	1-408-416-00 s INDUCTOR 39uH 1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-410-482-31 s INDUCTOR 100uH 1-408-425-00 s INDUCTOR 220uH
IC703 IC704 IC705 IC707	8-759-009-05 s IC MC14051BF 8-752-052-73 s IC CXA1451M 8-759-996-43 s IC RC4558PS 8-759-908-17 s IC TL082CPS	L405 L406 L407 L408 L409	1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-408-411-00 s INDUCTOR 15uH
IC709 IC710 IC711	8-759-908-17 s IC TL082CPS 8-759-105-49 s IC UPC319G2 8-759-702-08 s IC NJM360M	L410 L503 L504	1-410-476-11 s INDUCTOR 33uH 1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH
IC712 IC713 IC714 IC715	8-759-945-43 S IC RC455675 8-759-908-15 S IC TL431CLP 8-759-206-28 S IC TC74HC123F 8-759-250-81 S IC TC5081AP	L506 L508 L700 L701	1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-408-420-00 s INDUCTOR 82uH 1-410-482-31 s INDUCTOR 100uH
IC716 IC717 IC718 IC719	8-759-908-17 s IC TL082CPS 8-759-908-17 s IC TL082CPS 8-759-105-49 s IC UPC319G2  8-759-702-08 s IC NJM360M 8-759-996-43 s IC RC4558PS 8-759-908-15 s IC TL431CLP 8-759-206-28 s IC TC74HC123F 8-759-250-81 s IC TC5081AP  8-759-300-71 s IC HD14053BFP 8-759-041-53 s IC MC68HC05N4-SC406682 8-752-335-47 s IC CXD1216M 8-759-925-90 s IC SN74HC74NS	L702 L703 L704	1-410-478-11 S INDUCTOR 47uH 1-410-478-11 S INDUCTOR 47uH 1-408-419-00 S INDUCTOR 68uH

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Ref. No. or Q'ty	Part No. SP Description		Part No. SP Description
L705 L706 L708 L713 L715	1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH	R104 R105 R106 R107 R108	1-216-633-11 s METAL, CHIP 180 0.5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-652-11 s METAL, CHIP 1.1K 0.5% 1/10W 1-216-652-11 s METAL, CHIP 1.1K 0.5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
L717 L718 L719	1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-410-478-11 s INDUCTOR 47uH 1-407-569-00 s COIL, VAR 10UH 1-407-569-00 s COIL, VAR 10UH	R109 R111 R112 R113	1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-017-00 s METAL, CHIP 47 5% 1/10W
LV300 LV400	1-407-569-00 s COIL, VAR 10UH 1-407-569-00 s COIL, VAR 10UH	R114 R115	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
Q100 Q101 Q102 Q103 Q104	8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-118-56 s TRANSISTOR 2SK852-X2 8-729-140-63 s TRANSISTOR 2SA1611-M5M6	R124 R126 R127 R128	1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-093-00 s METAL, CHIP 1K 5% 1/10W 1-216-093-00 s METAL, CHIP 68K 5% 1/10W
Q200 Q201 Q202 Q203 Q203 Q301	1-407-569-00 s COIL, VAR 10UH  8-729-117-32 s TRANSISTOR 2SC4177  8-729-117-32 s TRANSISTOR 2SC4177  8-729-117-32 s TRANSISTOR 2SC4177  8-729-118-56 s TRANSISTOR 2SK852-X2  8-729-140-63 s TRANSISTOR 2SC4177  8-729-117-32 s TRANSISTOR 2SC4177  8-729-117-32 s TRANSISTOR 2SC4177  8-729-117-32 s TRANSISTOR 2SC4177  8-729-117-32 s TRANSISTOR 2SC4177  8-729-118-56 s TRANSISTOR 2SC4177  8-729-118-56 s TRANSISTOR 2SK852-X2  8-729-140-63 s TRANSISTOR 2SA1611-M5M6	R129 R130 R131 R132 R133	1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W 1-216-017-00 s METAL, CHIP 47 5% 1/10W 1-216-295-00 s METAL, CHIP 0 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
Q302 Q304 Q305 Q306 Q307	8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SC4177	R134 R200 R201 R203 R204	1-216-037-00 s METAL, CHIP 330 5% 1/10W 1-216-638-11 s METAL, CHIP 300 0.5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
Q308 Q401 Q402 Q404 Q405	8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6	R205 R206 R207	1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-652-11 s METAL, CHIP 1.1K 0.5% 1/10W 1-216-652-11 s METAL, CHIP 1.1K 0.5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
Q406 Q407 Q408 Q428 Q428 Q500	8-729-117-32 S TRANSISTOR 2SC4177 8-729-117-32 S TRANSISTOR 2SC4177 8-729-117-32 S TRANSISTOR 2SC4177 8-729-140-63 S TRANSISTOR 2SC4177 8-729-140-63 S TRANSISTOR 2SC4177 8-729-117-32 S TRANSISTOR 2SC4177 8-729-140-47 S TRANSISTOR 2SC3735-B34 8-729-117-32 S TRANSISTOR 2SC4177	R210 R211 R212 R213 R214	1-216-085-00 s METAL, CHIP 33K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-017-00 s METAL, CHIP 47 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
Q501 Q502 Q503 Q600 Q601	8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-905-18 s TRANSISTOR DTC144EU	R215 R224 R225 R226 R227	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W 1-216-017-00 s METAL, CHIP 47 5% 1/10W 1-216-295-00 s METAL, CHIP 0
Q602 Q700 Q702 Q703 Q704	8-729-905-18 S TRANSISTOR DTC144EU 8-729-905-18 S TRANSISTOR DTC144EU 8-729-117-32 S TRANSISTOR 2SC4177 8-729-117-32 S TRANSISTOR 2SC4177 8-729-140-63 S TRANSISTOR 2SA1611-M5M6 8-729-118-56 S TRANSISTOR 2SK852-X2	R228 R300 R301 R302 R303	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W
Q705 Q706 Q707 Q708 Q709	8-729-118-56 s TRANSISTOR 2SK852-X2 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177	R305 R306 R307 R308 R309	1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-117-00 s METAL, CHIP 680K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-059-00 s METAL, CHIP 2.7K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
Q714 Q715 Q717 Q718 Q719	8-729-117-32 S TRANSISTOR 2SC4177	R310 R311 R312 R313 R314	1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-085-00 s METAL, CHIP 33K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R100 R101 R103	1-216-638-11 s METAL, CHIP 300 0.5% 1/10W	R317 R318 R319 R320	1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W 1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-017-00 s METAL, CHIP 47 5% 1/10W 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W

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(TBC-18P BOARD)
Ref. No. or Q'ty Part No.
                                                       SP Description
                       1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
R831
R832
R833
R834
R835
                       1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R836
R837
R838
R839
R840
                       1-216-017-00 s METAL, CHIP 47 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R841
R842
R843
R844
R845
                       1-216-101-00 s METAL, CHIP 150K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R846
R847
R848
R849
R850
                       1-216-077-00 s METAL, CHIP 15K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
R852
R853
R854
R855
                       1-216-045-00 s METAL, CHIP 680 5% 1/10W 1-216-017-00 s METAL, CHIP 47 5% 1/10W 1-216-017-00 s METAL, CHIP 47 5% 1/10W 1-216-085-00 s METAL, CHIP 33K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
R856
R857
R858
 R859
 R860
                       1-216-089-00 s METAL, CHIP 47K 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-624-11 s METAL, CHIP 75 0.5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
 R865
 R866
 R867
 R869
R870
                        1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W 1-216-295-00 s METAL, CHIP 0
R871
R872
                       1-216-089-00 s METAL, CHIP 47K 5% 1/10W
1-216-089-00 s METAL, CHIP 47K 5% 1/10W
1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R873
R874
R875
RV100
                        1-238-796-11 s RES, ADJ METAL 100
                       1-238-796-11 S RES, ADJ METAL 100
1-238-801-11 S RES, ADJ METAL 5K
1-238-804-11 S RES, ADJ METAL 50K
1-238-803-11 S RES, ADJ METAL 20K
RV200
 RV301
RV302
RV303
 RV307
                        1-238-801-11 s RES, ADJ METAL 5K
                        1-238-801-11 s RES, ADJ METAL 5K
1-238-801-11 s RES, ADJ METAL 5K
 RV400
RV401
                        1-238-804-11 s RES, ADJ METAL 50K
1-238-801-11 s RES, ADJ METAL 5K
 RV402
RV403
                       1-238-786-11 s RES, ADJ METAL 5K
1-238-786-11 s RES, ADJ METAL 5K
 RV500
RV501
                       1-238-800-11 s RES, ADJ METAL 2K
1-238-801-11 s RES, ADJ METAL 5K
RV700
 RV701
                        1-238-787-11 s RES, ADJ METAL 10K
 RV702
                       1-238-787-11 s RES, ADJ METAL 10K
1-238-787-11 s RES, ADJ METAL 10K
1-238-799-11 s RES, ADJ METAL 1K
1-238-787-11 s RES, ADJ METAL 10K
 RV703
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RV704 RV705 RV706 (TBC-18P BOARD)

Ref. No. or Q'ty Part No. SP Description 1-238-787-11 s RES, ADJ METAL 10K 1-238-787-11 s RES, ADJ METAL 10K 1-238-801-11 s RES, ADJ METAL 5K 1-238-787-11 s RES, ADJ METAL 10K 1-238-800-11 s RES, ADJ METAL 2K RV707 **RV708** RV709 RV710 RV711 5700 1-570-623-11 s SWITCH, DIP 8-CKT

TR-73 BOARD

Ref. No. or Q'ty Part No. SP Description 1-640-161-11 o PRINTED CIRCUIT BOARD, TR-73 3-171-392-01 s HOLDER, DME 1pc CN920 1-506-483-21 s CONNECTOR 4P, MALE SS1 8-745-001-07 s DME DM-230-1

VP-33BP	BOARD	(VP-33BP	BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
1pc 2pcs		C188 C189 C190	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C1 C2 C3 C4	1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 S ELECT 47uF 20% 25V 1-163-037-11 S CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 S ELECT 47uF 20% 25V 1-124-477-11 S ELECT 47uF 20% 25V	C191 C192 C193	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C5 C6 C7	1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V	C194 C195 C196 C197	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C8 C9 C10	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C198 C211 C212	1-124-477-11 s ELECT 47uF 20% 25V 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C11 C12 C13 C20	1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-131-353-00 s TANTALUM 10uF 10% 35V 1-135-210-11 s TANTALUM, CHIP 4.7uF 20% 10V	C213 C214 C215	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V
C21 C22	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C216 C217 C218	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V
C102 C104 C105 C111	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C219 C220 C221	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C112 C120 C121	1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C222 C223 C224	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C122 C123 C124	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-108-00 s CERAMIC, CHIP 43PF 5% 50V 1-163-115-00 s CERAMIC, CHIP 82PF 5% 50V	C231 C232 C233 C234	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-124-477-11 s ELECT 47uF 20% 25V
C125 C126 C127	1-163-108-00 s CERAMIC, CHIP 43PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C235 C236	1-163-222-11 s CERAMIC, CHIP 5PF 50V 1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V
C128 C129 C130	1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V	C237 C238 C241 C242	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-124-477-11 s ELECT 47UF 20% 25V 1-124-903-11 s ELECT 1UF 20% 50V 1-124-903-11 s ELECT 1UF 20% 50V
C131 C132 C133	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C245	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C134 C135 C136 C137	1-163-245-11 s CERAMIC, CHIP 56PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C246 C261 C262	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C150 C154 C155	1-163-224-11 s CERAMIC, CHIP 7PF 50V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C263 C264 C265 C266	1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V 1-163-222-11 S CERAMIC, CHIP 5PF 50V
C161 C162 C163	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C267 C268	1-163-222-11 s CERAMIC, CHIP 5PF 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C164 C165 C166	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C269 C270 C272	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C167 C181 C182	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C291 C292 C293 C294	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-903-11 s ELECT 1uF 20% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C183 C184 C185 C186	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C295 C296 C297	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-162-714-11 s CERAMIC 150PF 1% 50V 1-126-103-11 s ELECT 470uF 20% 16V
C187	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C298 C299	1-120-103-11 S ELECT 4704 20% 10V 1-163-037-11 S CERAMIC, CHIP 0.0224F 10% 25V 1-124-927-11 S ELECT 4.74F 20% 100V

(VP-33BP	BOARD)	(VP-33BP	BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
C300	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V	C435	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-136-00 s CERAMIC, CHIP 620PF 5% 50V 1-163-257-11 s CERAMIC, CHIP 180PF 5% 50V
C301	1-163-114-00 s CERAMIC, CHIP 75PF 5% 50V	C436	
C302	1-163-115-00 s CERAMIC, CHIP 82PF 5% 50V	C437	
C303	1-163-130-00 s CERAMIC, CHIP 360PF 5% 50V	C438	
C304	1-163-131-00 s CERAMIC, CHIP 390PF 5% 50V	C450	
C305	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C451	1-163-135-00 s CERAMIC, CHIP 560PF 5% 50V
C306	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C461	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C307	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C462	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C308	1-124-477-11 s ELECT 47uF 20% 25V	C463	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C309	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C464	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C310	1-124-477-11 s ELECT 47uF 20% 25V	C465	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C311	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C466	
C312	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C467	
C313	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C468	
C314	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C469	
C315	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C470	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C316	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C471	
C321	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C472	
C322	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C473	
C323	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C474	
C324	1-126-103-11 s ELECT 470uF 20% 16V	C475	1-124-477-11 s ELECT 47uF 20% 25V
C325	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C507	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C326	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C508	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C327	1-163-091-00 s CERAMIC, CHIP 8PF 50V	C509	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C328	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C510	1-124-477-11 s ELECT 47uF 20% 25V
C329	1-124-119-00 s ELECT 330uF 20% 16V	C511	1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
C330	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C512	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C331	1-124-119-00 s ELECT 330uF 20% 16V	C513	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C340	1-164-695-11 s CERAMIC 0.0022uF 5% 50V	C514	1-124-477-11 s ELECT 47uF 20% 25V
C352	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C515	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C354	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C516	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C355	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C517	1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
C356	1-126-103-11 s ELECT 470uF 20% 16V	C518	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
C357	1-126-103-11 s ELECT 470uF 20% 16V	C519	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C367	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C520	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C368	1-127-518-11 s ALUMN SOLID 100uF 20% 16V	C521	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C369	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C522	
C370	1-127-518-11 s ALUMN SOLID 100uF 20% 16V	C523	
C371	1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V	C524	
C402	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C531	
C404	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C532	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C405	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V	C533	1-124-477-11 s ELECT 47uF 20% 25V
C409	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C534	1-124-477-11 s ELECT 47uF 20% 25V
C410	1-124-477-11 s ELECT 47uF 20% 25V	C535	1-163-222-11 s CERAMIC, CHIP 5PF 50V
C420	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C536	1-163-097-00 s CERAMIC, CHIP 15PF 5% 50V
C421	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C537	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
C422	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C538	1-124-477-11 s ELECT 47uF 20% 25V
C423	1-163-110-00 s CERAMIC, CHIP 51PF 5% 50V	C541	1-124-903-11 s ELECT 1uF 20% 50V
C424	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C542	1-124-903-11 s ELECT 1uF 20% 50V
C425	1-163-110-00 s CERAMIC, CHIP 51PF 5% 50V	C543	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C426	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C544	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C427	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C545	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C428	1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V	C546	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C429	1-163-253-11 s CERAMIC, CHIP 120PF 5% 50V	C561	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C430	1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V	C562	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
C431 C432 C433 C434	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-135-00 s CERAMIC, CHIP 560PF 5% 50V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V	C563 C564 C565 C566	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-222-11 s CERAMIC, CHIP 5PF 50V

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(VP-33BP	BOARD)			(VP-33BP	BOARD)	
Ref. No. or Q'ty	Part No. SP	Description		Ref. No. or Q'ty	Part No. SP Description	1
C567 C568 C569 C571 C591	1-163-037-11 s 1-163-037-11 s 1-163-037-11 s	CERAMIC, CHIP 5PF 50V CERAMIC, CHIP 0.022UF CERAMIC, CHIP 0.022UF CERAMIC, CHIP 0.022UF CERAMIC, CHIP 0.022UF	10% 25V 10% 25V	C722 C725 C726 C727 C728	1-163-222-11 S CERAMIC, CI 1-131-365-00 S TANTALUM 10 1-131-365-00 S TANTALUM 10 1-163-037-11 S CERAMIC, CI 1-130-491-00 S MYLAR 0.04	OUF 10% 20V OUF 10% 20V HIP 0.022UF 10% 25V
C592 C593 C594 C595 C596	1-163-037-11 s	CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF CERAMIC 150PF 1% 50V	10% 25V	C729 C730 C731 C732 C733	1-131-365-00 s TANTALUM 10 1-131-365-00 s TANTALUM 10 1-163-037-11 s CERAMIC, CI 1-130-491-00 s MYLAR 0.04' 1-163-227-11 s CERAMIC, CI	OuF 10% 20V HIP 0.022uF 10% 25V PuF 5% 50V
C597 C598 C599 C600 C601	1-163-037-11 s 1-124-927-11 s 1-163-239-11 s	ELECT 470uF 20% 16V CERAMIC, CHIP 0.022uF ELECT 4.7uF 20% 100V CERAMIC, CHIP 33PF 5% CERAMIC, CHIP 100PF 5%	10% 25V 50V	C734 C735 C736 C737 C738	1-163-251-11 s CERAMIC, CI 1-163-121-00 s CERAMIC, CI 1-163-037-11 s CERAMIC, CI 1-163-097-00 s CERAMIC, CI 1-163-125-00 s CERAMIC, CI	HIP 150PF 5% 50V HIP 0.022uF 10% 25V HIP 15PF 5% 50V
C602 C603 C604 C621 C622	1-163-037-11 s 1-124-477-11 s 1-163-037-11 s	CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF ELECT 47uF 20% 25V CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF	10% 25V 10% 25V	C739 C740 C741 C742 C743	1-163-037-11 s CERAMIC, CI 1-163-037-11 s CERAMIC, CI 1-163-243-11 s CERAMIC, CI 1-163-227-11 s CERAMIC, CI 1-163-087-00 s CERAMIC, CI	HP 0.022uF 10% 25V HP 47PF 5% 50V HP 10PF 5% 50V
C623 C624 C625 C626 C627	1-126-103-11 s 1-163-037-11 s 1-163-037-11 s	CERAMIC, CHIP 0.022uF ELECT 470uF 20% 16V CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF CERAMIC, CHIP 5PF 50V	10% 25V	C744 C745 C746 C747 C748	1-163-037-11 s CERAMIC, CI 1-124-477-11 s ELECT 47uF 1-163-037-11 s CERAMIC, CI 1-163-239-11 s CERAMIC, CI 1-163-113-00 s CERAMIC, CI	20% 25V HIP 0.022uF 10% 25V HIP 33PF 5% 50V
C628 C629 C630 C631 C632	1-124-119-00 s 1-163-037-11 s 1-124-119-00 s	CERAMIC, CHIP 0.022uF ELECT 330uF 20% 16V CERAMIC, CHIP 0.022uF ELECT 330uF 20% 16V ELECT 100uF 20% 16V		C749 C750 C751 C752 C753	1-163-239-11 s CERAMIC, CI 1-163-037-11 s CERAMIC, CI 1-163-239-11 s CERAMIC, CI 1-163-113-00 s CERAMIC, CI 1-163-239-11 s CERAMIC, CI	HIP 0.022uF 10% 25V HIP 33PF 5% 50V HIP 68PF 5% 50V
C640 C652 C654 C655 C656	1-163-037-11 s 1-163-037-11 s 1-163-037-11 s	CERAMIC, CHIP 0.0022uF CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF ELECT 470uF 20% 16V	10% 25V 10% 25V	C754 C755 C756 C757 C759	1-163-037-11 s CERAMIC, CI 1-163-037-11 s CERAMIC, CI 1-163-037-11 s CERAMIC, CI 1-163-037-11 s CERAMIC, CI 1-163-251-11 s CERAMIC, CI	IIP 0.022uF 10% 25V IIP 0.022uF 10% 25V IIP 0.022uF 10% 25V
C657 C667 C668 C669 C670	1-163-037-11 s 1-127-518-11 s 1-163-037-11 s	ELECT 470uF 20% 16V CERAMIC, CHIP 0.022uF ALUMN SOLID 100uF 20% CERAMIC, CHIP 0.022uF ALUMN SOLID 100uF 20%	16V 10% 25V	C760 C761 C762 C763 C764	1-163-037-11 s CERAMIC, CH 1-163-037-11 s CERAMIC, CH 1-163-227-11 s CERAMIC, CH 1-163-097-00 s CERAMIC, CH 1-163-243-11 s CERAMIC, CH	IIP 0.022uF 10% 25V IIP 10PF 5% 50V IIP 15PF 5% 50V
C702 C703 C704 C705 C706	1-163-037-11 s 1-131-365-00 s 1-131-365-00 s	CERAMIC, CHIP 100PF 57 CERAMIC, CHIP 0.022uF TANTALUM 10uF 10% 20V TANTALUM 10uF 10% 20V MYLAR 0.047uF 5% 50V	6 50V 10% 25V	C765 C766 C767 C768 C769	1-163-227-11 s CERAMIC, CH 1-163-237-11 s CERAMIC, CH 1-163-097-00 s CERAMIC, CH 1-163-243-11 s CERAMIC, CH 1-163-227-11 s CERAMIC, CH	IIP 27PF 5% 50V IIP 15PF 5% 50V IIP 47PF 5% 50V
C707 C708 C709 C710 C711	1-163-227-11 s 1-163-037-11 s 1-163-037-11 s	CERAMIC, CHIP 10PF 5% CERAMIC, CHIP 10PF 5% CERAMIC, CHIP 0.022uF CERAMIC, CHIP 0.022uF CERAMIC, CHIP 10PF 5%	50V 10% 25V 10% 25V	C770 C771 C772 C773 C774	1-163-237-11 s CERAMIC, CH 1-124-477-11 s ELECT 47uF 1-124-477-11 s ELECT 47uF 1-163-113-00 s CERAMIC, CH 1-163-113-00 s CERAMIC, CH	20% 25V 20% 25V IIP 68PF 5% 50V
C712 C713 C714 C715 C716	1-163-227-11 s 1-131-365-00 s 1-131-365-00 s	ELECT 47uF 20% 25V CERAMIC, CHIP 10PF 5% TANTALUM 10uF 10% 20V TANTALUM 10uF 10% 20V MYLAR 0.047uF 5% 50V		C780 C781 C782 C790 C801	1-163-227-11 s CERAMIC, CH 1-163-251-11 s CERAMIC, CH 1-163-237-11 s CERAMIC, CH 1-163-227-11 s CERAMIC, CH 1-163-037-11 s CERAMIC, CH	IIP 100PF 5% 50V IIP 27PF 5% 50V IIP 10PF 5% 50V
C717 C718 C719 C721	1-163-097-00 s 1-163-125-00 s	CERAMIC, CHIP 0.022uF CERAMIC, CHIP 15PF 5% CERAMIC, CHIP 220PF 5% CERAMIC, CHIP 47PF 5%	50V 4 50V	C802 C803 C901 C902	1-163-037-11 s CERAMIC, CH 1-163-037-11 s CERAMIC, CH 1-124-477-11 s ELECT 47uF 1-163-037-11 s CERAMIC, CH	IP 0.022uF 10% 25V 20% 25V

BOARD)	(VP-33BP	BOARD)
Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
1-124-477-11 s ELECT 47uF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C962 C963	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V
1-124-477-11 S ELECT 470F 20% 25V	C964	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 S CERAMIC, CHIP 0.0220F 10% 25V	C965	1-124-477-11 s ELECT 47uF 20% 25V
1-124-477-11 S ELECT 470F 20% 25V	C966	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C967	1-124-477-11 s ELECT 47uF 20% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C968	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C969	1-124-477-11 s ELECT 47uF 20% 25V
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C970	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C971	1-124-477-11 s ELECT 47uF 20% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C972 C973	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C974	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C975	1-124-477-11 s ELECT 47uF 20% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C976	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C977 C978	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1.162-027-11 s CERAMIC, CHIP 0.022UF 10% 25V
1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V 1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V	C980 C981	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C982 C983	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C984	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-124-477-11 s ELECT 47UF 20% 25V	C985	1-124-477-11 s ELECT 47uF 20% 25V
1-124-477-11 s ELECT 47UF 20% 25V	C991	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-119-00 s ELECT 330uF 20% 16V	C992 C993	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V	C994	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-124-119-00 S ELECT 330UF 20% 16V	C995	1-124-477-11 s ELECT 47uF 20% 25V
1-163-037-11 S CERAMIC, CHIP 0.022UF 10% 25V	C1001	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	C1002 C2001	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C2002	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
1-124-477-11 s ELECT 47UF 20% 25V	C3001	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	C3002	1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V
1-124-477-11 s ELECT 47uF 20% 25V	CN101	1-506-468-11 s CONNECTOR 3P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN102	1-506-468-11 s CONNECTOR 3P, MALE
1-124-477-11 s ELECT 47uF 20% 25V	CN103	1-573-600-21 s CONNECTOR, PHEC 100P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN104	1-573-600-21 s CONNECTOR, PHEC 100P, MALE
1-124-477-11 s ELECT 47uF 20% 25V	CN105	1-506-494-11 s CONNECTOR 15P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	CN203	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC. CHIP 0.022UF 10% 25V	CN204	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN205	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN401	1-506-468-11 s CONNECTOR 3P, MALE
1-124-477-11 s ELECT 47uF 20% 25V	CN402	1-506-468-11 s CONNECTOR 3P, MALE
1-124-477-11 s ELECT 47uF 20% 25V	CN503	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN504	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	CN701	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	CN702	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V	CN703	1-506-469-11 s CONNECTOR 4P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	CN704	1-506-469-11 s CONNECTOR 4P, MALE
1-124-477-11 s ELECT 47uF 20% 25V	CN705	1-506-467-11 s CONNECTOR 2P, MALE
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	D1	1-565-479-11 s CONNECTOR, BB 20P 8-719-941-04 s DIODE SB007-03CP
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	D201 D501	8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1 8-719-123-82 s DIODE 1SS303-T1
1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V 1-124-477-11 s ELECT 47uF 20% 25V	D701	8-719-123-82 s DIODE 1SS303-T1
	Part No. SP Description  1-124-477-11 s ELECT 47UF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-124-477-11 s ELECT 47UF 20% 25V 1-124-477-11 s ELECT 47UF 20% 25V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-124-477-11 s ELECT 47UF 20% 25V 1-124-4119-00 s ELECT 330UF 20% 16V 1-163-037-11 s CERAMIC, CHIP 0.022UF 10% 25V 1-16	PART NO. SP Description  Ref. No. or Q'ty  1-124-477-11 s ELECT 47UF 20X 25V  1-163-037-11 s CERAMIC, CHIP 0.022UF 10X 25V  1-163-037-11 s CERAMIC, CHIP 0.022UF

(VP-33BP	BOARD)	(VP-33BP	BOARD)
	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
L512	1-410-470-11 s INDUCTOR 10uH	Q162	8-729-905-12 s TRANSISTOR DTA144EU
L513	1-410-462-11 s INDUCTOR 2.2uH	Q163	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L531	1-408-427-00 s INDUCTOR 330uH	Q164	8-729-117-72 s TRANSISTOR 2SC4178
L532	1-410-482-31 s INDUCTOR 100uH	Q165	8-729-905-12 s TRANSISTOR DTA144EU
L561	1-410-471-11 s INDUCTOR 12uH	Q167	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L591	1-408-408-00 s INDUCTOR 8.2uH	Q168	8-729-117-72 s TRANSISTOR 2SC4178
L594	1-410-482-31 s INDUCTOR 100uH	Q169	8-729-117-72 s TRANSISTOR 2SC4178
L621	1-410-482-31 s INDUCTOR 100uH	Q181	8-729-117-72 s TRANSISTOR 2SC4178
L622	1-410-482-31 s INDUCTOR 100uH	Q182	8-729-905-12 s TRANSISTOR DTA144EU
L651	1-410-482-31 s INDUCTOR 100uH	Q183	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L652	1-410-482-31 s INDUCTOR 100uH	Q184	8-729-117-72 S TRANSISTOR 2SC4178
L701	1-410-482-31 s INDUCTOR 100uH	Q185	8-729-905-12 S TRANSISTOR DTA144EU
L702	1-410-476-11 s INDUCTOR 33uH	Q186	8-729-143-07 S TRANSISTOR 2SA1610-YY33
L703	1-410-482-31 s INDUCTOR 100uH	Q187	8-729-117-72 S TRANSISTOR 2SC4178
L704	1-408-413-00 s INDUCTOR 22uH	Q188	8-729-905-12 S TRANSISTOR DTA144EU
L705	1-408-414-00 s INDUCTOR 27uH	Q189	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L706	1-408-414-00 s INDUCTOR 27uH	Q190	8-729-117-72 s TRANSISTOR 2SC4178
L707	1-408-414-00 s INDUCTOR 27uH	Q191	8-729-117-72 s TRANSISTOR 2SC4178
L708	1-408-414-00 s INDUCTOR 27uH	Q192	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L709	1-408-416-00 s INDUCTOR 39uH	Q193	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L710	1-408-416-00 s INDUCTOR 39uH	Q194	8-729-117-72 S TRANSISTOR 2SC4178
L711	1-410-478-11 s INDUCTOR 47uH	Q201	8-729-905-12 S TRANSISTOR DTA144EU
L712	1-410-482-31 s INDUCTOR 100uH	Q204	8-729-905-12 S TRANSISTOR DTA144EU
L720	1-408-413-00 s INDUCTOR 22uH	Q205	8-729-905-12 S TRANSISTOR DTA144EU
L721	1-408-419-00 s INDUCTOR 68uH	Q211	8-729-117-72 S TRANSISTOR 2SC4178
L901 L902 L903 L904 L905	1-410-482-31 S INDUCTOR 100uH 1-410-482-31 S INDUCTOR 100uH 1-410-482-31 S INDUCTOR 100uH 1-410-482-31 S INDUCTOR 100uH 1-410-482-31 S INDUCTOR 100uH	Q213 Q214 Q215 Q241	8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610-YY33
L906	1-410-482-31 S INDUCTOR 100uH	Q250	8-729-905-18 s TRANSISTOR DTC144EU
L907	1-410-482-31 S INDUCTOR 100uH	Q252	8-729-905-18 s TRANSISTOR DTC144EU
L908	1-410-482-31 S INDUCTOR 100uH	Q261	8-729-117-72 s TRANSISTOR 2SC4178
L909	1-410-482-31 S INDUCTOR 100uH	#Q262	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L910	1-410-482-31 S INDUCTOR 100uH	Q263	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L911	1-410-482-31 s INDUCTOR 100uH	Q264	8-729-117-72 s TRANSISTOR 2SC4178
L912	1-410-482-31 s INDUCTOR 100uH	#Q265	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L913	1-410-482-31 s INDUCTOR 100uH	Q266	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L914	1-410-482-31 s INDUCTOR 100uH	Q270	8-729-905-12 s TRANSISTOR DTA144EU
L915	1-410-482-31 s INDUCTOR 100uH	Q291	8-729-117-72 s TRANSISTOR 2SC4178
L916	1-410-482-31 s INDUCTOR 1000H	Q292	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L917	1-410-482-31 s INDUCTOR 1000H	Q293	8-729-117-72 s TRANSISTOR 2SC4178
L918	1-410-482-31 s INDUCTOR 1000H	Q294	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L919	1-410-482-31 s INDUCTOR 1000H	Q321	8-729-117-72 s TRANSISTOR 2SC4178
L920	1-410-482-31 s INDUCTOR 1000H	Q322	8-729-143-07 s TRANSISTOR 2SA1610-YY33
L921	1-410-482-31 s INDUCTOR 100uH	Q323 Q324	8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178
Q20 Q120 Q121 Q122	1-410-482-31 s INDUCTOR 100uH 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178	Q325	8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610-YY33
Q123 Q124 Q125 Q126	8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178	Q328 Q329 Q351 Q352 Q420	8-729-143-07 s TRANSISTOR 2SA1610-YY33 8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610-YY33 8-729-117-32 s TRANSISTOR 2SC4177
Q127	8-729-117-72 S TRANSISTOR 2SC4178	Q421	8-729-117-72 s TRANSISTOR 2SC4178
Q128	8-729-143-07 S TRANSISTOR 2SA1610-YY33	Q422	8-729-117-72 s TRANSISTOR 2SC4178
Q151	8-729-117-72 S TRANSISTOR 2SC4178	Q423	8-729-117-72 s TRANSISTOR 2SC4178
Q161	8-729-117-72 S TRANSISTOR 2SC4178	Q424	8-729-117-72 s TRANSISTOR 2SC4178

(VP-33BP	BOARD)		<i>:</i>	(VP-33BP	BOARD)
Ref. No. or Q'ty	Part No. SP Description			Ref. No. or Q'ty	Part No. SP Description
Q425 Q426 Q427 Q428 Q461	8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610- 8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610- 8-729-117-72 s TRANSISTOR 2SC4178	-YY33 -YY33		Q731 Q732 Q733 Q734 Q735	8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-143-14 s TRANSISTOR 2SC4176-B35 8-729-140-63 s TRANSISTOR 2SA1611-M5M6
Q462 Q463 Q464 Q465 Q466	8-729-905-12 s TRANSISTOR DTA144E 8-729-143-07 s TRANSISTOR 2SA1610 8-729-117-72 s TRANSISTOR 2SC4178 8-729-905-12 s TRANSISTOR DTA144E 8-729-143-07 s TRANSISTOR 2SA1610	J -YY33 J -YY33		Q736 Q737 Q738 Q739 Q740	8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-143-14 s TRANSISTOR 2SC4176-B35
Q467 Q468 Q501 Q504 Q505	8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-905-12 s TRANSISTOR DTA144E 8-729-905-12 s TRANSISTOR DTA144E 8-729-905-12 s TRANSISTOR DTA144E	J J		Q741 Q742 Q743 Q746 Q747	8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177
Q513 Q514 Q515 Q541 Q550	8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610- 8-729-905-18 s TRANSISTOR DTC144E	-YY33 J		Q748 Q749 Q750 Q751 Q752	8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177
Q552 Q561 Q563 Q570 Q591	8-729-905-18 S TRANSISTOR DTC144E 8-729-117-72 S TRANSISTOR 2SC4178 8-729-143-07 S TRANSISTOR 2SA1610 8-729-905-12 S TRANSISTOR DTA144E 8-729-117-72 S TRANSISTOR 2SC4178	- <b>YY33</b> U		Q753 Q754 Q755 Q756 Q757	8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6
Q592 Q621 Q622 Q623 Q624	8-729-143-07 S TRANSISTOR 2SA1610- 8-729-117-72 S TRANSISTOR 2SC4178 8-729-143-07 S TRANSISTOR 2SA1610-	-YY33 -YY33		Q758 Q759 Q760	8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6
Q625 Q626 Q627 Q628 Q629	8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610- 8-729-143-07 s TRANSISTOR 2SA1610- 8-729-117-72 s TRANSISTOR 2SC4178	-YY33 -YY33		Q763 Q764 Q765 Q766 Q767	8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6 8-729-209-07 s TRANSISTOR 2SC4213-B 8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611-M5M6
Q651 Q652 Q701 Q702 Q703	8-729-117-72 s TRANSISTOR 2SC4178 8-729-143-07 s TRANSISTOR 2SA1610 8-729-117-32 s TRANSISTOR 2SC4177 8-729-143-14 s TRANSISTOR 2SC4176 8-729-143-07 s TRANSISTOR 2SA1610	_บบวว		Q768 Q770 Q771 Q772 Q773	8-729-905-18 s TRANSISTOR DTC144EU 8-729-118-56 s TRANSISTOR 2SK852-X2 8-729-118-56 s TRANSISTOR 2SK852-X2 8-729-118-56 s TRANSISTOR 2SK852-X2 8-729-118-56 s TRANSISTOR 2SK852-X2
Q704 Q705 Q706 Q707 Q708	8-729-143-07 s TRANSISTOR 2SA1610 8-729-143-14 s TRANSISTOR 2SC4176 8-729-143-07 s TRANSISTOR 2SA1610 8-729-904-41 s TRANSISTOR FMY3 8-729-904-41 s TRANSISTOR FMY3	-B35 -YY33		Q1001 Q1002 Q1003 Q1004 Q1005	8-729-904-04 s TRANSISTOR FMS2 8-729-923-06 s TRANSISTOR FMW8 8-729-903-82 s TRANSISTOR FMW2 8-729-931-46 s TRANSISTOR FMW7 8-729-907-26 s TRANSISTOR IMX1
Q709 Q710 Q711 Q712 Q713	8-729-117-32 s TRANSISTOR 2SC4177 8-729-143-14 s TRANSISTOR 2SC4176 8-729-117-32 s TRANSISTOR 2SC4177 8-729-904-41 s TRANSISTOR FMY3 8-729-143-14 s TRANSISTOR 2SC4176			Q2001 Q2002 Q2003 Q2004 Q2005	8-729-904-04 s TRANSISTOR FMS2 8-729-923-06 s TRANSISTOR FMW8 8-729-903-82 s TRANSISTOR FMW2 8-729-931-46 s TRANSISTOR FMW7 8-729-907-26 s TRANSISTOR IMX1
Q714 Q715 Q716 Q717 Q718	8-729-140-63 s TRANSISTOR 2SA1611 8-729-117-32 s TRANSISTOR 2SC4177 8-729-140-63 s TRANSISTOR 2SA1611 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177	-M5M6 -M5M6		Q3001 Q3002 Q3003 Q3004 Q3005	8-729-904-04 s TRANSISTOR FMS2 8-729-923-06 s TRANSISTOR FMW8 8-729-903-82 s TRANSISTOR FMW2 8-729-931-46 s TRANSISTOR FMW7 8-729-907-26 s TRANSISTOR IMX1
Q719 Q728 Q729 Q730	8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177 8-729-117-32 s TRANSISTOR 2SC4177			R2 R3 R4 R5	1-216-097-00 s METAL, CHIP 100K 5% 1/10W

# (VP-33BP BOARD)

Ref. No. or Q'ty	Part No. SP Description
RV703	1-238-799-11 s RES, ADJ METAL 1K
RV704	1-238-799-11 s RES, ADJ METAL 1K
RV705	1-238-799-11 s RES, ADJ METAL 1K
RV706	1-238-799-11 s RES, ADJ METAL 1K
RV707	1-238-799-11 s RES, ADJ METAL 1K
RV708	1-238-799-11 s RES, ADJ METAL 1K
RV709	1-238-798-11 s RES, ADJ METAL 500
RV712	1-238-800-11 s RES, ADJ METAL 2K
RV713	1-238-019-11 s RES, ADJ CARBON 47K
RV714	1-238-019-11 s RES, ADJ CARBON 47K
RV715	1-238-799-11 s RES, ADJ METAL 1K
RV716	1-238-799-11 s RES, ADJ METAL 1K
RV718	1-238-801-11 s RES, ADJ METAL 5K
RV719	1-238-799-11 s RES, ADJ METAL 1K
RV720	1-238-019-11 s RES, ADJ CARBON 47K
RV721	1-238-013-11 s RES, ADJ CARBON 2.2K
RV722	1-238-799-11 s RES, ADJ METAL 1K
RV723	1-238-013-11 s RES, ADJ CARBON 2.2K
RV724	1-238-799-11 s RES, ADJ METAL 1K
RV725	1-238-015-11 s RES, ADJ CARBON 4.7K
RV726	1-238-015-11 s RES, ADJ CARBON 4.7K
S101	1-571-258-11 s SWITCH, SLIDE
S401	1-571-258-11 s SWITCH, SLIDE
S701	1-570-857-11 s SWITCH, SLIDE
S702	1-570-857-11 s SWITCH, SLIDE
S703	1-570-857-11 s SWITCH, SLIDE
TH202	1-800-202-11 s THERMISTOR, S-10K
TH203	1-800-202-11 s THERMISTOR, S-10K
#TH301	1-800-199-00 s THERMISTOR, S-1250
#TH601	1-800-199-00 s THERMISTOR, S-1250

# VR-116B BOARD

Ref. No. or Q'ty	Part No. SP Description	n <sup>es</sup> ,
1pc	1-640-039-31 o PRINTED CI	RCUIT BOARD, VR-116A
CN400 CN401 CN402 CN405 CN407	1-569-345-11 s CONNECTOR,	6P, MALE 6P, MALE BB 21P
J1	1-507-863-51 s JACK, PHON	E
R5 R6 R7 R8	1-216-671-11 s METAL, CHI 1-216-663-11 s METAL, CHI 1-216-671-11 s METAL, CHI 1-216-663-11 s METAL, CHI	P 3.3K 0.5% 1/10W P 6.8K 0.5% 1/10W
RV2 RV4 RV5	1-241-248-11 s RES, VAR (11-241-248-11 s RES, VAR (11-241-577-11 s RES	WITH SW) CARBON 10K WITH SW) CARBON 10K ARBON 20K

FRAME	(FRAME)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc A-8260-249-A s HEAD DRUM ASSY, DBH-34A-R 1pc A-8260-250-A s UPPER DRUM ASSY, DBR-34-R 1pc A-8262-727-A s BRUSH ASSY	1-569-196-11 o HOUSING 3P 1-569-194-11 o CONTACT, FEMALE AWG24-30
1pc	CN260F (to MB-322 board) 1-562-258-11 o HOUSING 10P 1-562-260-11 o CONTACT, FEMALE
	CN292F (to MB-322 board) 1-562-286-11 o HOUSING 5P 1-562-210-11 o CONTACT, FEMALE AWG18-22
CN001 ▲1-580-375-21 o INLET, AC 3P, MALE	CN293F (to MB-322 board)
CN1F (to AU-150 board) 1-569-196-11 o HOUSING 3P 1-569-194-11 o CONTACT, FEMALE AWG24-30	1-562-833-11 o HOUSING 7P 1-562-210-11 o CONTACT, FEMALE AWG18-22
CN1F (to Drum Motor) 1-580-938-11 o HOUSING 15P 1-569-191-21 o CONTACT, FEMALE AWG22-26	CN294F (to MB-322 board) 1-562-287-11 o HOUSING 6P 1-562-210-11 o CONTACT, FEMALE AWG18-22
CN1F (to PTC-39 board) 1-562-151-11 o HOUSING 6P	CN300F (to DR-118 board) 1-562-258-11 o HOUSING 10P 1-562-260-11 o CONTACT, FEMALE
1-564-026-11 o CONTACT, FEMALE AWG24-30 CN1F (to RP-57 board)	CN315F (to DR-118 board) 1-569-196-11 o HOUSING 3P
1-569-196-11 o HOUSING 3P 1-569-194-11 o CONTACT, FEMALE AWG24-30	1-569-193-21 o CONTACT, FEMALE AWG24-30 1-569-191-21 o CONTACT, FEMALE AWG22-26
CN1F (to Switching Reg.) A1-562-285-11 o HOUSING 4P A1-562-210-11 o CONTACT, FEMALE AWG18-22	CN323F (to DR-118 board) 1-569-196-11 o HOUSING 3P 1-569-193-21 o CONTACT, FEMALE AWG24-30 1-569-191-21 o CONTACT, FEMALE AWG22-26
CN2F (to AU-148 board) 1-569-196-11 o HOUSING 3P 1-569-194-11 o CONTACT, FEMALE AWG24-30	CN360F (to DR-118 board) 1-569-208-11 o HOUSING 15P 1-569-193-21 o CONTACT, FEMALE AWG24-30
CN2F (to AU-149 board) 1-569-196-11 o HOUSING 3P 1-569-194-11 o CONTACT, FEMALE AWG24-30	CN509F (to SW-444 board) 1-569-195-11 o HOUSING 2P 1-569-193-21 o CONTACT, FEMALE AWG24-30
CN2F (to AU-150 board) 1-569-202-11 o HOUSING 9P 1-569-193-21 o CONTACT, FEMALE AWG24-30 1-569-191-21 o CONTACT, FEMALE AWG22-26	CN926F (to RM-82 board) 1-562-149-11 o HOUSING 4P 1-564-026-11 o CONTACT, FEMALE AWG24-30
CN2F (to KY-210 board) 1-562-151-11 o HOUSING 6P 1-564-026-11 o CONTACT, FEMALE AWG26-30	CN935F (to CL-25 board) 1-569-195-11 o HOUSING 2P 1-569-193-21 o CONTACT, FEMALE AWG24-30
CN2F (to RP-57 board) 1-569-196-11 o HOUSING 3P 1-569-194-11 o CONTACT, FEMALE AWG24-30	CN968F (to Head Drum) 1-569-199-11 o HOUSING 6P 1-569-194-11 o CONTACT, FEMALE AWG24-30
CN2F (to Switching Reg.) 1-562-286-11 o HOUSING 5P 1-562-210-11 o CONTACT, FEMALE AWG18-22	CN969F (to Head Drum) 1-569-199-11 o HOUSING 6P 1-569-194-11 o CONTACT, FEMALE AWG24-30
CN3F (to Switching Reg.) 1-562-833-11 o HOUSING 7P 1-562-210-11 o CONTACT, FEMALE AWG18-22	1-569-192-11 o CONTACT, FEMALE AWG22-26  CN998F (to AC-133 board) Al-562-285-11 o HOUSING 4P Al-562-210-11 o CONTACT FEMALE AWG18-22
CN4F (to Switching Reg.) 1-562-287-11 o HOUSING 6P 1-562-210-11 o CONTACT, FEMALE AWG18-22	△1-562-210-11 o CONTACT, FEMALE AWG18-22  CN999F (to AC-133 board) △1-562-285-11 o HOUSING 4P △1-562-210-11 o CONTACT, FEMALE AWG18-22
CN101F (to RP-57 board) 1-569-196-11 o HOUSING 3P 1-569-194-11 o CONTACT, FEMALE AWG24-30	H001 8-825-776-22 s HEAD PS244-2103E "AUDIO/TC" 8-825-776-41 s HEAD PS244-21C "CTL"
CN102F (to RP-57 board)	L001 1-543-316-31 s HEAD, SENSING

### (FRAME)

S001

Ref. No. or Q'ty Part No. SP Description L002 1-543-316-31 s HEAD, SENSING 1-541-431-31 s FAN, DC 8-835-179-01 s MOTOR, DC MCB2B15 8-835-179-01 s MOTOR, DC MCB2B15 A-6737-207-A s RM ASSY "T-REEL" A-6737-207-A s RM ASSY "T-REEL" M001 M002 M003 M004 M005 8-835-179-01 s MOTOR, DC MCB2B15 8-835-445-01 s MOTOR, DC SCV-0301A M006 M007 1-520-494-11 s METER, VIDEO LEVEL 1-520-393-21 s METER, AUDIO LEVEL 1-520-393-21 s METER, AUDIO LEVEL ME001 ME002 ME003 1-454-372-11 s SOLENOID PM001 1-454-417-41 s SOLENOID 1-454-417-41 s SOLENOID PM002 PM003 1-454-338-00 s SOLENOID PM004

**1-570-117-11** s SWITCH, ROCKER "POWER"

#### PACKING MATERIALS & SUPPLIED ACCESSORIES

Ref. No. or Q'ty Part No. SP Description

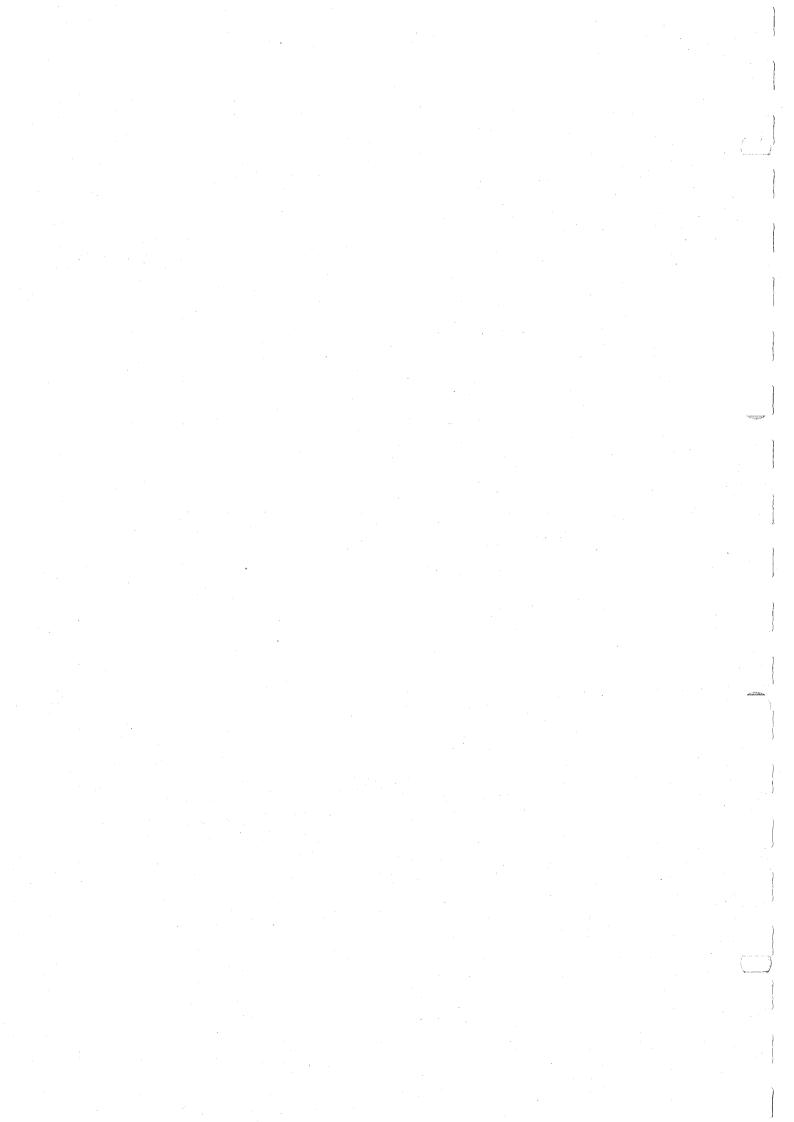
1pc 1-555-873-13 o CABLE, REMOTE 9P (RCC-5G) 5m 1pc A1-590-910-11 s CORD, POWER 3P 1pc 3-176-044-01 o INDIVIDUAL CARTON 1pc 3-701-616-00 s BAG, POLYETHYLENE 1pc 3-701-649-00 s BAG, POLYETHYLENE

1pc 3-721-869-05 o CUSHION (UPPER) 1pc 3-721-870-02 o CUSHION (LOWER) 1pc 3-721-888-01 o SPACER (SIDE) 1pc 3-721-889-01 o SLEEVE (A) 1pc 3-721-890-01 o SLEEVE (B)

1pc 3-755-060-11 s MANUAL, INSTRUCTION (English) 1pc 3-755-060-41 s MANUAL, INSTRUCTION (French) 1pc 3-755-060-51 s MANUAL, INSTRUCTION (Germam) 1pc 3-755-060-61 s MANUAL, INSTRUCTION (Italian) 4pc 7-682-965-01 s SCREW +PSW 4X16

#### OPTIONAL FIXTURE

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SP Description
   Part No.
A-6766-389-A O EXTENSION BOARD (L), EX-286
J-6001-820-A O DRUM ECCENTRICITY GAUGE (3)
J-6001-830-A O DRUM ECCENTRICITY GAUGE (2)
J-6001-840-A O DRUM ECCENTRICITY GAUGE (1)
J-6031-830-A O MULTI CONNECTOR CABLE (DOBNC)
J-6035-070-A O EXTRACTION TOOL (for PLCC socket)
J-6080-008-A O CASSETTE REFERENCE PLATE
J-6080-011-A O REEL TABLE TENSION GAUGE
J-6080-029-A O ADJUSTMENT MIRROR
J-6080-840-A O ADJUSTMENT MIRROR
J-6086-570-A O REFERENCE FLAT PLATE
J-6087-000-A O DRUM ECCENTRICITY GAUGE (5)
J-6152-450-A O WIRE CLEARANCE GAUGE
J-6320-680-A O REEL TABLE HEIGHT GAUGE
J-6320-870-A O REEL MOTOR SHAFT SLANTNESS CHECK FIXTURE
J-6320-880-A O CASSETTE BASE PLATE (L)
J-6321-500-A O TAPE GUIDE ADJUSTMENT DRIVER
J-6322-370-A O TENSION REGULATOR POSITIONING TOOL
J-6325-530-A O DRUM ECCENTRICITY GAUGE (6)
J-6327-850-A O DIAL TENSION GAUGE (50g)
 J-6327-930-A O TENSION MEASUREMENT TAPE
J-6338-130-A O EXTENSION BOARD (S), EX-287
 2-034-697-00 o CLEANING PIECE
 7-661-018-18 0 OIL
7-662-001-41 0 MOLYTON GREASE, NO.320 (30g bottle)
7-662-010-04 o GREASE, SGL-505 (20g)
7-700-736-01 o L-SHAPED HEXAGONAL WRENCH (d:1.27mm)
7-700-736-05 o L-SHAPED HEXAGONAL WRENCH (d:1.5mm)
7-700-736-06 o L-SHAPED HEXAGONAL WRENCH (d:0.89mm)
7-732-050-20 o TENSION SCALE (50g full scale)
7-732-050-30 o TENSION SCALE (100g full scale)
8-960-096-51 o ALIGNMENT TAPE, CR2-1B PS
8-960-096-86 o ALIGNMENT TAPE, CR8-1B PS
8-960-096-91 o ALIGNMENT TAPE, CR5-1B PS
8-960-098-44 o ALIGNMENT TAPE, CR5-2A PS
8-960-098-45 O ALIGNMENT TAPE, CR8-1A PS
9-911-053-00 O THICKNESS GAUGE
9-919-573-01 O CLEANING FLUID
STANDARD TENTELOMETER (T2-H7-UMC)
    PRODUCTS
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# SECTION 19 CHANGED PARTS

112) S/N 10001 - 10100 203) S/N 10496 - 10605 201) S/N 10101 - 10295 204) S/N 10606 and higher 202) S/N 10296 - 10495

AU-148AP	BOARD	AU-149AP BOARD
OLD) C1C 201) C1C OLD) C1C 201) C1C OLD) C1C 201) C1C	1 DELETED. 2 1-163-012-00 s CERAMIC, CHIP 1800PF 10% 50V 2 DELETED. 3 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V	OLD) C101
OLD) D10 201) D10 OLD) D10 201) D10 OLD) D10 201) D10	1 DELETED. 2 8-719-941-23 s DIODE DA204U 2 DELETED. 5 8-719-941-23 s DIODE DA204U	OLD) D101 8-719-941-23 s DIODE DA204U 201) D101 DELETED. OLD) D102 8-719-941-23 s DIODE DA204U 201) D102 DELETED. OLD) D105 8-719-941-23 s DIODE DA204U 201) D105 DELETED.
OLD) IC1 201) IC1 OLD) Q10 201) Q10 OLD) Q10 201) Q10	05 DELETED. 1 8-729-143-07 s TRANSISTOR 2SA1610-YY33 1 DELETED. 2 8-729-143-07 s TRANSISTOR 2SA1610-YY33	OLD) IC105 8-759-240-69 s IC TC4069UBP 201) IC105 DELETED. OLD) Q101 8-729-143-07 s TRANSISTOR 2SA1610-YY33 201) Q101 DELETED. OLD) Q102 8-729-143-07 s TRANSISTOR 2SA1610-YY33 201) Q102 DELETED.
OLD) R10 201) R10 OLD) R10 201) R10 OLD) R10 201) R10	DELETED. 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W DELETED. 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W	OLD) R101 1-216-111-00 s METAL, CHIP 390K 5% 1/10W 201) R101 DELETED. OLD) R102 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 201) R102 DELETED. OLD) R103 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 201) R103 DELETED.
OLD) R10 201) R10 OLD) R10 201) R10 OLD) R10 201) R10	DELETED. 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W DELETED. 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W	OLD) R104 1-216-111-00 s METAL, CHIP 390K 5% 1/10W 201) R104 DELETED. OLD) R105 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 201) R105 DELETED. OLD) R106 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W 201) R106 DELETED.
OLD) R10 201) R10 OLD) R14 201) R14 OLD) R14 201) R14	DELETED. 1 1-215-475-00 s METAL 180K 1% 1/6W DELETED. 3 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W	OLD) R107 1-216-089-00 s METAL, CHIP 47K 5% 1/10W 201 R107 DELETED. OLD) R143 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W 201 R143 1-216-692-11 s METAL, CHIP 51K 0.5% 1/10W OLD) R144 1-215-493-00 s METAL 1M 1% 1/6W 1-215-459-00 s METAL 39K 1% 1/6W
OLD) R14 201) R14 OLD) R14 201) R14 OLD) R14 201) R14	1-215-485-11 s METAL 470k 1% 1/4W 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W 1-216-692-11 s METAL, CHIP 51K 0.5% 1/10W 1-215-459-00 s METAL 39K 1% 1/6W	OLD) R148 1-215-467-00 s METAL 82K 1% 1/6W 201) R148 1-215-477-00 s METAL 220K 1% 1/6W OLD) RY101 1-515-434-11 s RELAY, REED 201) RY102 1-515-434-11 s RELAY, REED 201) RY102 DELETED.
OLD) RY1 201) RY1 OLD) RY1 201) RY1	01 DELETED. 02 1-515-434-11 s RELAY, REED	 AU-150A BOARD

OLD) C5 201) C5 OLD) C8 201) C8 1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V DELETED.
1-164-232-11 s CERAMIC 0.01uF 10% 100V DELETED.

(AU-150A BOARD)

(AU-150A BOARD)

OLD) 201)	C40 C40	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V DELETED.	OLD) R40 201) R40 OLD) R41	1-216-081-00 s METAL, CHIP 22K 5% 1/10W DELETED. 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
OLD) 201)	C201 C201	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V DELETED.	201) R41	DELETED.
OLD) C506 201) C506 OLD) C507 201) C507	1-163-037-11 s CERAMIC, CHIP 0.022uF 10% 25V DELETED. 1-124-477-11 s ELECT 47uF 20% 25V DELETED.	OLD) R42 201) R42	1-216-073-00 s METAL, CHIP 10K 5% 1/10W DELETED.	
		OLD) R206 201) R206	1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W DELETED.	
OLD)	C509	1-126-101-11 s ELECT 100uF 20% 16V	OLD) R210 201) R210	1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W DELETED.
201) C509 OLD) C514 201) C514	DELETED. 1-126-101-11 s ELECT 100uF 20% 16V DELETED.	OLD) R214 201) R214	1-216-089-00 s METAL, CHIP 47K 5% 1/10W DELETED.	
OLD ) 201)	D4 D4	8-719-123-85 s DIODE 1SS304 DELETED.	OLD) R217 201) R217	1-216-049-00 s METAL, CHIP 1K 5% 1/10W DELETED.
OLD)	D201	8-719-123-82 s DIODE 1SS303-T1	OLD) R218 201) R218	1-216-049-00 s METAL, CHIP 1K 5% 1/10W DELETED.
201) OLD)	D201 IC201	DELETED. 8-757-991-00 s IC CX7991	OLD) R219	1-216-049-00 s METAL, CHIP 1K 5% 1/10W
201) OLD)	IC201 L1	DELETED. 1-408-423-00 s INDUCTOR 150uH	201) R219 OLD) R221	DELETED. 1-216-049-00 s METAL, CHIP 1K 5% 1/10W DELETED.
201) OLD)	L1 Q3	DELETED.  8-729-420-14 s TRANSISTOR 2SK614	201) R221 OLD) R234 201) R234	1-216-049-00 s METAL, CHIP 1K 5% 1/10W DELETED.
201) OLD)	Q3 Q4	DELETED. 8-729-209-07 s TRANSISTOR 2SC4213-B	OLD) R235	1-216-049-00 s METAL, CHIP 1K 5% 1/10W
201) OLD)	04 07	DELETED. 8-729-143-07 s TRANSISTOR 2SA1610-YY33	201) R235 OLD) R502	DELETED. 1-249-411-11 s CARBON 330 5% 1/4W
201)	Q7	DELETED.	201) R502	DELETED.
OLD) 201)	Q8 Q8	8-729-118-58 S TRANSISTOR 2SX852-X4 DELETED.		
OLD) Q202 201) Q202	Q202 Q202 Q206	8-729-117-32 s TRANSISTOR 2SC4177 DELETED. 8-729-143-07 s TRANSISTOR 2SA1610-YY33		
OLD) 201)	Q206	DELETED.	CL-25 BOARD	
OLD) 201)	Q219 Q219	8-729-905-12 s TRANSISTOR DTA144EU DELETED.	OLD) 1pc	1-640-170-12 O PRINTED CIRCUIT BOARD, CL-25 1-640-170-13 O PRINTED CIRCUIT BOARD, CL-25
OLD) 201)	Q220 Q220	8-729-905-18 s TRANSISTOR DTC144EU DELETED.	201) 1pc	1-640-170-13 o PRINTED CIRCUIT BOARD, CL-25
OLD) 201)	Q223 Q223	8-729-905-12 s TRANSISTOR DTA144EU DELETED.		
OLD) 201)	Q224 Q224	8-729-905-18 s TRANSISTOR DTC144EU DELETED.		
OLD) 201)	Q502 Q502	8-729-805-25 s TRANSISTOR 2SB1121-S	DR-118A BOARD	
OLD) 201)	R9 R9	1-216-089-00 s METAL, CHIP 47K 5% 1/10W DELETED.	OLD) C103	1-124-120-11 s ELECT 220uF 20% 25V
OLD)	R10	1-216-073-00 s METAL, CHIP 10K 5% 1/10W	202) C103 OLD) R256	1-124-478-11 s ELECT 100uF 20% 25V 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
201) R10 OLD) R14	DELETED. 1-218-025-00 s METAL, CHIP 100 5% 1/10W	201) R256 OLD) R257 201) R257	1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W	
201) OLD) 201)	R14 R23 R23	DELETED. 1-216-025-00 s METAL, CHIP 100 5% 1/10W DELETED.	OLD) R266	1-216-081-00 s METAL, CHIP 22K 5% 1/10W
OLD)	R25	1-216-089-00 s METAL, CHIP 47K 5% 1/10W	201) R266 OLD) R267	1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
201) OLD)	R25 R26	DELETED. 1-216-089-00 s METAL, CHIP 47K 5% 1/10W	201) R267 OLD) R276	1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
201) OLD)	R26 R35	DELETED. 1-216-121-00 s METAL, CHIP 1M 5% 1/10W	201) R276	1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
201) OLD)	R35 R36	DELETED. 1-216-121-00 s METAL, CHIP 1M 5% 1/10W	OLD) R277 201) R277 OLD) R286	1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
201)	R36	DELETED.	201) R286	1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W

(DR-118A BOARD)	RP-57BP BOARD
OLD) R287 1-216-081-00 s METAL, CHIP 22K 5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W OLD) R401 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W 1-216-670-11 s METAL, CHIP 6.2K 0.5% 1/10W	OLD) C702 1-126-101-11 s ELECT 100uF 20% 16V 202) C702 1-124-477-11 s ELECT 47uF 20% 25V OLD) C703 1-126-101-11 s ELECT 100uF 20% 16V 202) C703 1-124-477-11 s ELECT 47uF 20% 25V OLD) C706 1-126-101-11 s ELECT 100uF 20% 16V 202) C706 1-124-477-11 s ELECT 47uF 20% 25V
DT-30 BOARD	OLD)       C713       1-126-101-11       s ELECT 100uF 20% 16V         202)       C713       1-124-477-11       s ELECT 47uF 20% 25V         OLD)       C714       1-126-101-11       s ELECT 100uF 20% 16V         202)       C714       1-124-477-11       s ELECT 47uF 20% 25V         OLD)       C717       1-126-101-11       s ELECT 100uF 20% 16V         202)       C717       1-124-477-11       s ELECT 47uF 20% 25V
OLD) IC203 8-759-925-05 s IC LM2903PS 202) IC203 8-759-981-65 s IC LM2903M	OLD) C719 1-126-101-11 s ELECT 100uF 20% 16V 202) C719 1-124-477-11 s ELECT 47uF 20% 25V OLD) C721 1-126-101-11 s ELECT 100uF 20% 16V 202) C721 1-124-477-11 s ELECT 47uF 20% 25V OLD) C722 1-126-101-11 s ELECT 100uF 20% 16V 202) C722 1-124-477-11 s ELECT 47uF 20% 25V
MB-322B BOARD	OLD) C725 1-126-101-11 s ELECT 100uF 20% 16V 202) C725 1-124-477-11 s ELECT 47uF 20% 25V
OLD) CN225 1-568-935-11 o CONNECTOR 8P, MALE 203) CN225 DELETED. 1-565-882-11 o CONNECTOR 10P, MALE 203) CN226 DELETED.	SS-48P BOARD
PC-62 BOARD	OLD) IC707 8-759-054-54 s IC SRM2016M10 201) IC707 8-752-323-63 s IC CXK5816M-10L
OLD) 1pc 3-176-598-01 o SPRING, GROUND 204) 1pc 3-176-598-02 o SPRING, GROUND	VP-33BP BOARD
PD-56 BOARD	OLD) Q262 8-729-905-12 s TRANSISTOR DTA144EU 202) Q262 8-729-143-07 s TRANSISTOR 2SA1610-YY33 OLD) Q265 8-729-905-12 s TRANSISTOR DTA144EU 202) Q265 8-729-143-07 s TRANSISTOR 2SA1610-YY33 OLD) R337 1-216-638-11 s METAL, CHIP 300 0.5% 1/10W 202) R337 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W
OLD) 1pc 1-640-162-12 o PRINTED CIRCUIT BOARD, PD-56 201) 1pc 1-640-162-13 o PRINTED CIRCUIT BOARD, PD-56 OLD) R1 1-249-428-11 s CARBON 8.2K 5% 1/4W 201) R1 DELETED. OLD) R2 1-249-428-11 s CARBON 8.2K 5% 1/4W 201) R2 DELETED.	OLD) R362 NOT IN USE. 202) R362 1-216-049-00 s METAL, CHIP 1K 5% 1/10W OLD) R363 NOT IN USE. 202) R363 1-216-063-00 s METAL, CHIP 3.9K 5% 1/10W OLD) R364 NOT IN USE. 202) R364 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
PTC-39 BOARD	OLD) R365 NOT IN USE. 202) R365 1-216-063-00 s METAL, CHIP 3.9K 5% 1/10W OLD) R368 NOT IN USE. 202) R368 1-216-664-11 s METAL, CHIP 3.6K 0.5% 1/10W OLD) R636 1-216-645-11 s METAL, CHIP 560 0.5% 1/10W 202) R636 1-216-646-11 s METAL, CHIP 620 0.5% 1/10W
OLD) 1pc 1-633-548-12 o PRINTED CIRCUIT BOARD, PTC-39 1-633-548-13 o PRINTED CIRCUIT BOARD, PTC-39	OLD) R644 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W OLD) R649 NOT IN USE. 202) R649 1-216-672-11 s METAL, CHIP 7.5K 0.5% 1/10W

# (VP-33BP BOARD)

OLD) 204)	R1001 R1001	1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-033-00 s METAL, CHIP 220 5% 1/10W
OLD) 204) OLD) 204) OLD) 202)	R2001 R2001 R3001 R3001 RV504 RV504	1-238-801-11 s RES, ADJ METAL 5K
OLD) 202) OLD) 202)	RV505 RV505 TH301 TH301 TH601	1-238-802-11 s RES, ADJ METAL 10K NOT IN USE. 1-800-199-00 s THERMISTOR, S-1250
202)	TH601	